

Volvo Ocean Race 2017-18
Sustainability Report



Founding Principal Partner



Principal Partner



Main Partners



We support



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Index

Sustainability	4
Introduction	6
Highlights	10
Partners in success	14
Planning for success	18
Maximise our impact	22
Commitment, engagement and satisfaction	24
Advocacy and outreach	36
Inclusivity, diversity and safety	52
Minimise our footprint	64
Environmental protection	66
Energy, water and resource recovery	76
Reducing our single-use plastic footprint	92
Responsible, sustainable and conservative sourcing	106
Climate change impacts	114
Leave a positive legacy	124
Information and science	126
Innovation and solutions	140
Knowledge and excellence	148
Building on our success	156
Case Studies	158
Clean Seas campaign and commitments	160
Ocean Summits	174
Vestas 11th Hour Racing	188
Mirpuri Foundation	194
Education Programme	196
Sustainability programming and activations	206
Community engagement	210
Reusable cup system	214
Re-use Hub Hong Kong	216
Compostable serveware	218
Resource recovery	220
Compostable resources	252
Plastic leaks	260
Science Programme	264
Beach cleans	274
Supporting success	278
Appendix	282
Stakeholders	284
The Race and the SDGs	288
Sustainability Framework	294
Performance against objectives and targets	298

Sustainability

Whether racing across oceans, or in our Race Villages, we were able to use Our global platform as a force for good, encouraging positive change amongst the millions of people we touched along the way.

Sustainability and ocean health are key issues for all sailors who spend much of their lives out on the ocean - and their passionate first-hand testimony during the Race really brought home the urgency and global scale of the plastic problem.

In 2017-18, we used the Race as a powerful and unique platform to explore the issues and solutions to the devastating plastic crisis impacting upon our seas, bringing together the worlds of business, sport, science and government through a wide-ranging campaign which included Ocean Summits, a groundbreaking Science Programme, an Education Programme to inspire the next generation, and we 'walked the talk' through our Race Village experiences and operations, with a special focus on eliminating single-use plastic.

This message spread far beyond our physical presence at stopovers, reaching the many millions of people we were able to engage through both ours and our partners' digital platforms. Our vital message on Ocean health also received considerable attention and amplification through a wide range of regional, national and international media.

This Sustainability Report expands upon the detail provided in the Race Report and offers a deep dive into our approach to sustainability management, our objectives, targets, successes and lessons learned.

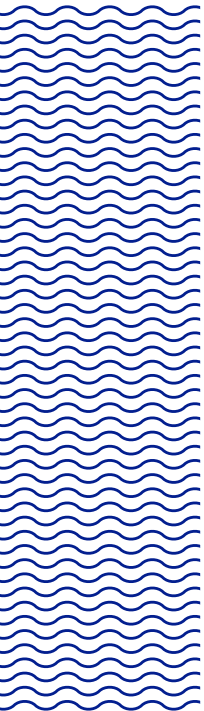




Photo: Jesús Renedo/Volvo Ocean Race



Introduction

As the ocean is their playground, concern for the environment has gone hand in hand with being a sailor and environmental programmes have been part of past editions of the Race.

We have previously highlighted causes and campaigns relating to Ocean Health such as Race For The Oceans, Keep The Oceans Clean Programme and collaboration with UNESCO. In the last edition of the Race the inaugural Ocean Summit was held at our Newport stopover. Our host cities have also previously included environmental programming and education themes in Race Villages, and conducted beach cleans to highlight the issue of plastic pollution in our ocean.

Over the past few years an increasing body of international evidence has highlighted how far plastic waste has spread across our vast ocean. If the rate of pollution continues, in the near future, it has been projected that there may be more plastic than fish in our seas.

After drifting down rivers, much of this plastic may start its ocean journey as large items but, over time, these pieces, such as bottles or even garden chairs and fridges, break down into tiny particles, invisible to the naked eye. Whether big or small, this is contributing to a global ocean crisis, impacting on the many forms of sealife it supports.

With Ocean Health and a focus on plastic pollution as the basis of our Sustainability Programme, we created a strategy that would have global impact, that ensured we managed our own operations sustainably and left a positive legacy.

To commit to a strategic approach to sustainability management and our Ocean Health campaigning, the Race leadership team signed a Sustainability Charter setting out our intentions for the 2017-18 Race. Joining us enthusiastically and with ever-growing momentum were our partners and sponsors, host cities, teams, sailors, event staff, volunteers, followers and fans.

We created a platform on which we were able to speak to millions about this urgent issue and how we all have a role to play in helping to restore Ocean Health.

By devising our Sustainability Programme, we were able to maximise our global impact and act as a catalyst for real change offering impactful solutions to governments, businesses and individuals.

Leading by example, we also took considerable steps to responsibly reduce our own plastic footprint, and produced a template for how sport and sustainability could be combined as a force for positive action.

Partnerships

In collaboration with Founding Principal Sustainability Partner 11th Hour Racing, Principal Partner Mirpuri Foundation, and our other main sustainability partners, Volvo, AkzoNobel, Bluewater, Stena Recycling and Ocean Family Foundation, the programme pursued objectives to educate, innovate and leave a lasting legacy.

Clean Seas Campaign

Joining forces with UN Environment's #CleanSeas campaign further strengthened our message and offered a platform for public commitments and pledges on how governments, businesses and individuals could commit to reduce their reliance on plastic.

Sustainable Development Goals

The Sustainability Programme was designed to support many of the UN Sustainable Development Goals, particularly SDG 14 Life Below Water.

Science Programme

To advance science by combining it with sailing, an expert scientific consortium, funded by Volvo Cars, used cutting edge technology to capture and analyse the most relevant ocean data. This included information on the global spread of microplastics, the extent to which a changing climate is affecting Ocean Health and environmental measurements that will help better predict weather patterns.

Ocean Summits

Convening a series of seven Ocean Summits and workshops, at key host cities, the problems, linked to Ocean Health, were discussed by over two thousand people including key influencers, such as politicians, scientists and business leaders, and innovative solutions were proposed to shift current thinking and engender positive action.

Communications and outreach

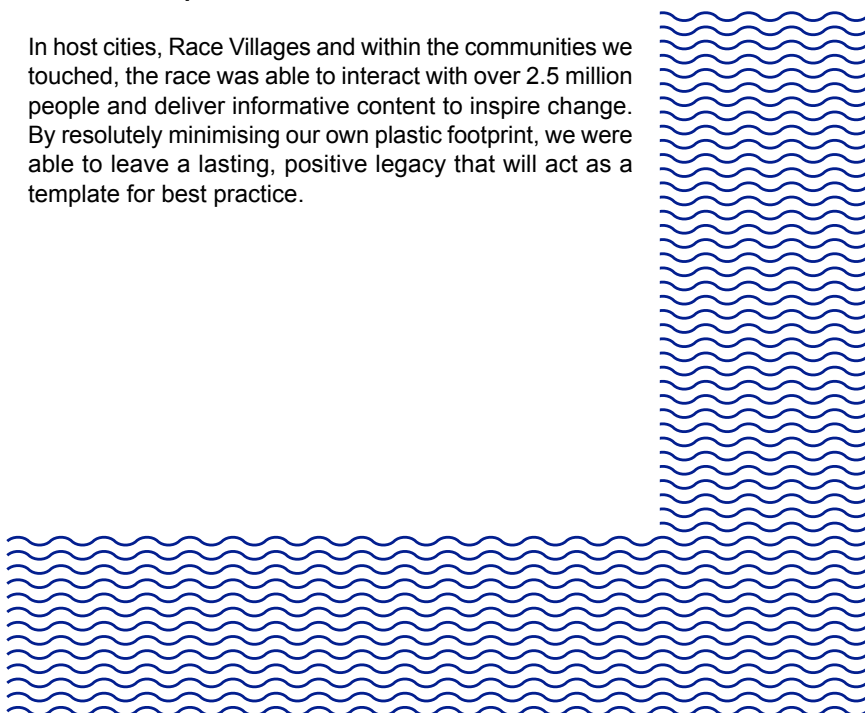
Using the Race's powerful platform, our sustainability message was able to reach tens of millions of people around the world, including online fans, followers and many more who simply weren't aware of the scale of the problem.

Education Programme

Over one hundred thousand school children became Champions for the Sea, through our exciting, curriculum based, Education Programme, available online and delivered in workshops at the Race Villages.

Sustainable operations

In host cities, Race Villages and within the communities we touched, the race was able to interact with over 2.5 million people and deliver informative content to inspire change. By resolutely minimising our own plastic footprint, we were able to leave a lasting, positive legacy that will act as a template for best practice.



A message from the Race owners



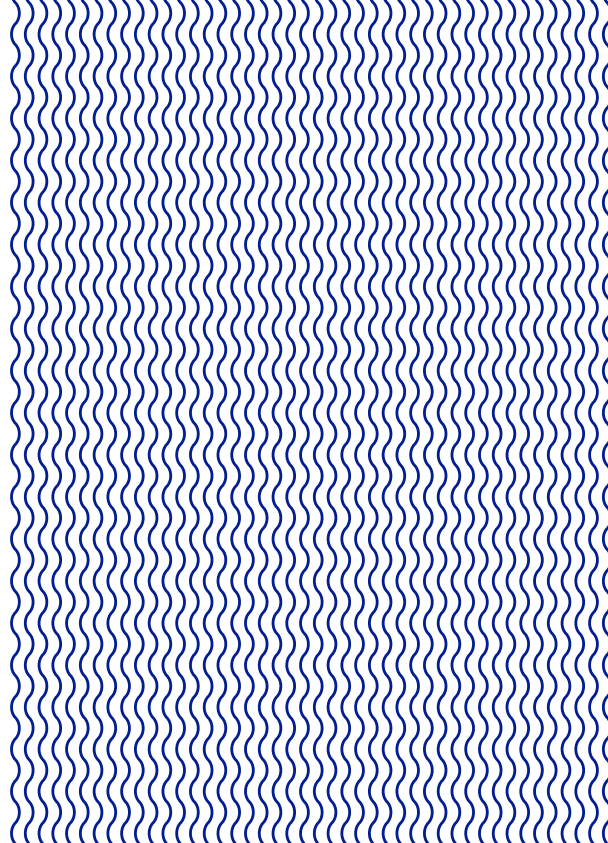
Photo: Ainhoa Sánchez/Volvo Ocean Race

There is a natural and logical fit between the Race and the pressing environmental challenges we need to tackle in our ocean today.

At the crossroad of **sport, nature, science** and **business**, our Race is uniquely positioned to connect this critical issue, to a high-profile sporting event that uses the ocean as it's racetrack.

The global reach and timeframe of the Race offered us the opportunity to have a significant impact.

We try to place care for the planet and people at the heart of our decisions, and so in framing our sustainability approach, we considered what we **stand by** and **stand for**, as an organisation. We have a deep commitment to ethical, fair, responsible and sustainable business practice.



We have seen in recent years, and certainly over the duration of this last edition of our Race, a rising tide of interest in sustainable practice in sailing and sports events, and an understanding of how the issues connected to Ocean Health are becoming more socially and politically prominent.

The IOC recently released their Sustainability Report and World Sailing launched their Sustainability Agenda 2030. We were proud to host them both at our Ocean Summit in Cardiff where they made commitments through signing the CleanSeas pledge, our partner campaign with UN Environment.

As an event that brings millions of people together across diverse destinations, we also had a duty to operate responsibly. We worked hard so that our Race and event production reflected our environmental commitments and that we positively contributed to the communities who hosted us.

We are very happy with our achievements in maximising our impact, minimising our footprint and leaving a positive legacy, the cornerstones of our sustainability strategy.

We can do better of course and we didn't always meet our ambitious targets. But we will build upon the lessons learned during this last edition by showing real leadership and through an organisational commitment to put sustainability at the heart of the race.

Our host cities, race teams, sailors, partners, sponsors, event staff, volunteers and suppliers are all enthusiastically joining us on this exciting journey to deliver our vital programme of work.

Richard Brisius,
President of the Race.

Johan Salén,
Co-President of the Race.

Highlights

The Race's Sustainability Programme offered an unparalleled opportunity to connect the urgent global issue of Ocean Health and plastic pollution to a high-profile sports event.

By utilising the global reach and timeframe of the Race, we were able to deliver significant successes.

Millions of Race Village visitors and tens of millions of online fans and followers have been touched by our campaign - real experiences of plastic reduction in our Race Villages, inspiring and informative video content on screens, news

stories and social media, commitments to Clean Seas, participation in our Education Programme, attending beach cleans, TedX talks, and even an ocean film festival.

Our Ocean Summits brought thinkers and doers together, our Education Programme has left lasting impressions on young minds and ongoing leadership has been forged through inspiring our sailors and teams. Our ground-breaking Science Programme collected unprecedented datasets contributing precious new knowledge on Ocean Health.

2,500,000

visitors to Race Villages received our sustainability messages

404,000

visitors to the Globe in our Race Villages viewed our sustainability films and Clean Seas exhibition

20,000

people signed the UN Environment #CleanSeas Pledge

3

countries (Spain, New Zealand and Wales) and a range of businesses, cities and states signed up to Clean Seas

114,000

children from 40 countries took part in our Education Programme, available in seven languages

388,207

single-use plastic bottles avoided across the twelve stopovers

1,000,000

single-use plastic food and beverage service-ware items avoided

180,000

single-use cable ties avoided by having re-usable bungee straps

67%

of all waste resources recovered, recycled or composted

30

scientific drifter buoys successfully deployed - transmitting data to NOAA in Miami to help scientists understand weather patterns

25,826

one minute averages of oceanographic measurements recorded by the boats

86

microplastic samples analysed from round-the world sampling by Turn the Tide on Plastic and Team AkzoNobel, with 93% containing microplastic particles

225

speakers, 1,827 decision makers attended seven Ocean Summits

24,102

online articles published on the Sustainability Programme with 820,555,488 views

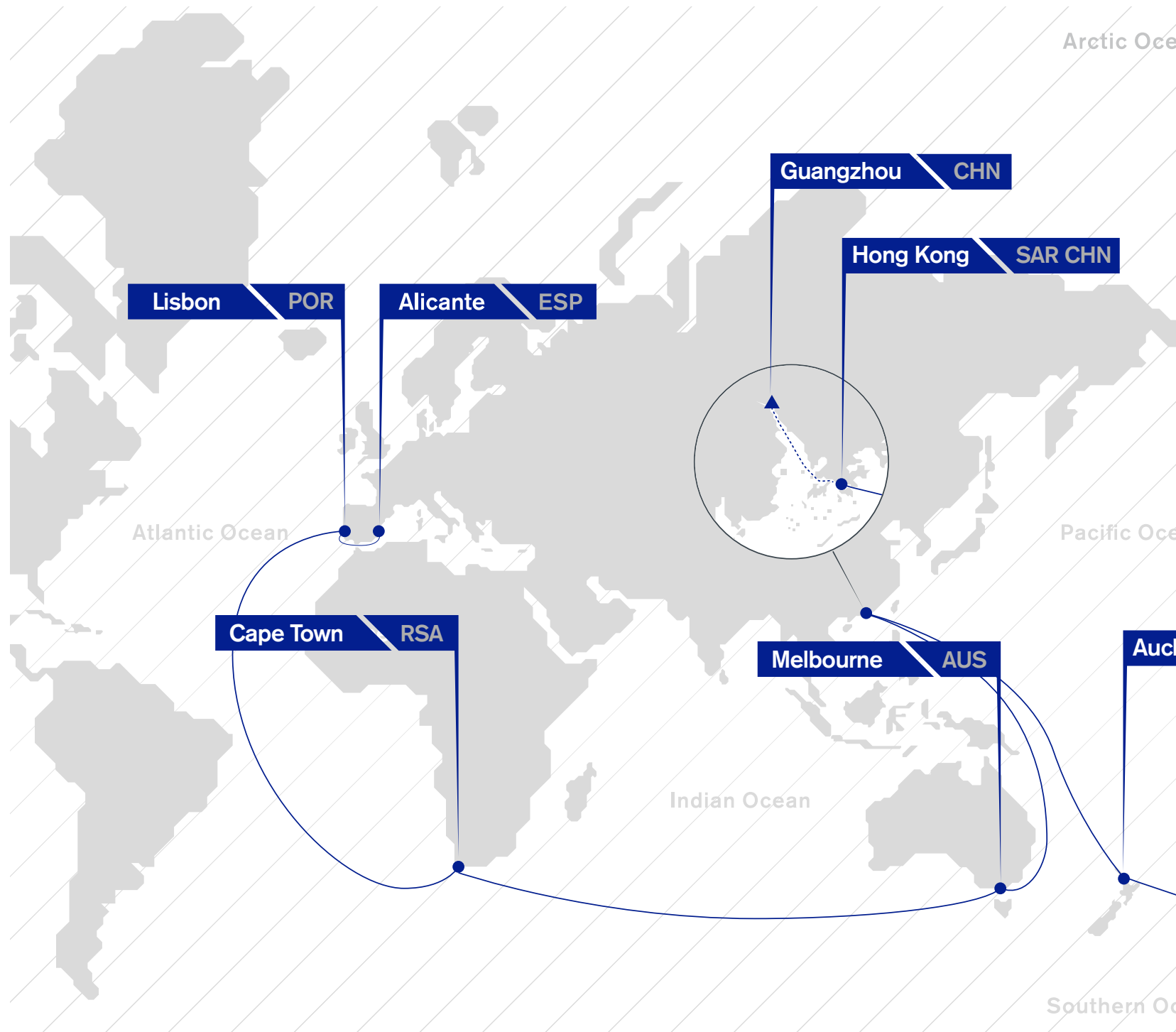
About the Race

The Race is a challenge bigger than sport. It is the world's longest and toughest sporting event, with best sailors on the planet battling the elements, as well as each other, in a test of teamwork, skill and individual endurance.

Sailing in the Race requires total commitment. Once the race starts, it is nine months and 45,000 nautical miles of the closest, toughest competition in sport.

The 2017-18 Volvo Ocean Race was the 13th edition of a competition that started out as the Whitbread Round the World Race in 1973. In 2001 Volvo Group and Volvo Cars took ownership, and in 2010 the Race moved headquarters from Portsmouth UK to Alicante Spain.

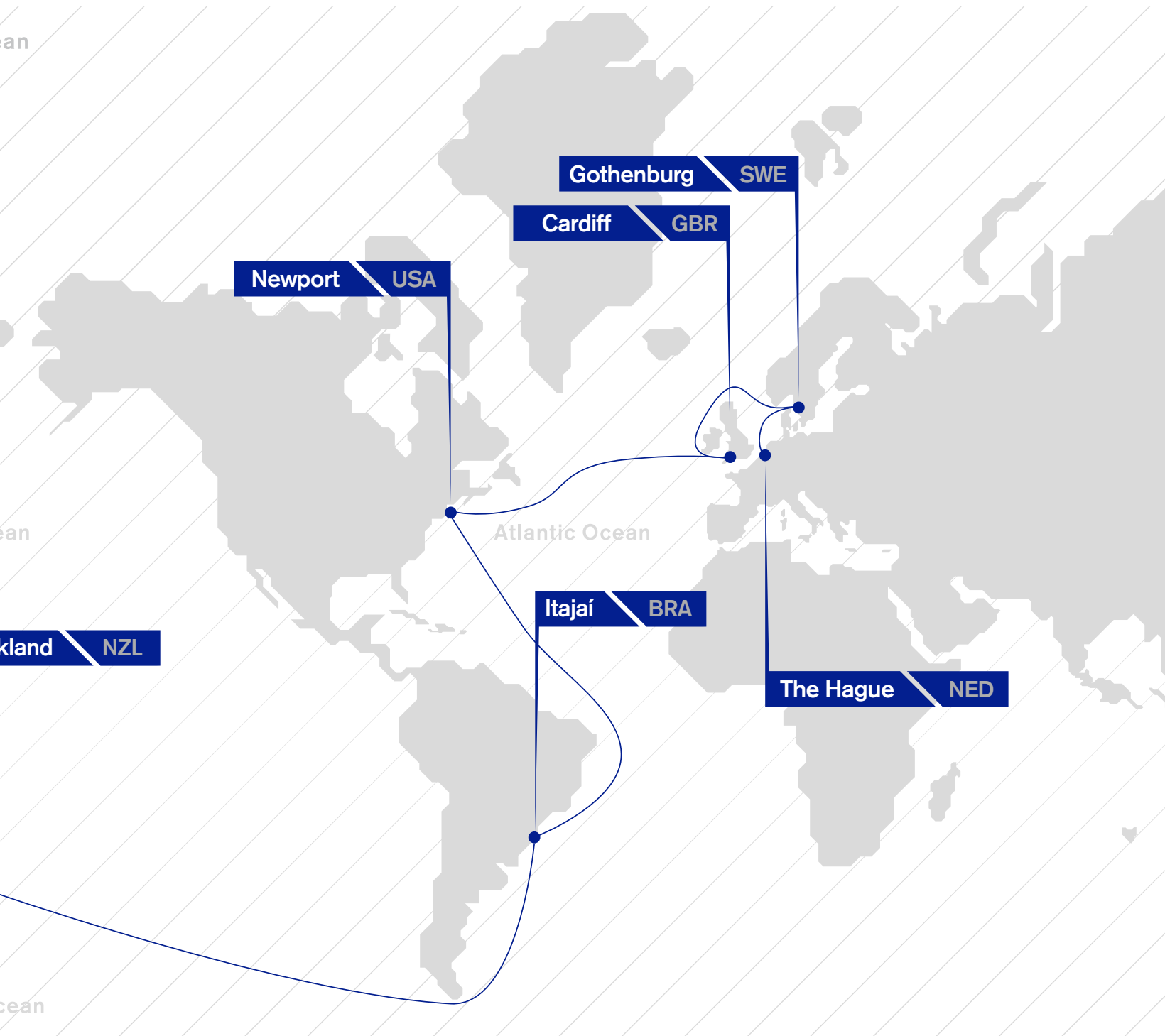
The Race consists of three main operational focuses – race boat design and construction (or re-fit), Race Teams and Race Operations, and the Race Villages in each destination.



The headquarters for the event is in Alicante, Spain. A significant second operational base was in Lisbon, Portugal, where the permanent Boatyard was located.

The overall race project also involves delivery and operational partners and major suppliers including for the Boatyard and key Race Village assets, as well as delivery partners such as Volvo and Host Cities.

Our stakeholder matrix can be viewed in the following pages and is outlined further in the [Appendix](#).





Partners in success

Striking out on our sustainability journey it was important we teamed up with credible partners who have global reach, a strategic alignment with our sustainability ambitions and love for the ocean and its health.

We have achieved this with Founding Principle Partner of our Sustainability Programme **11th Hour Racing**. Likewise our Principal Partner **Mirpuri Foundation**, and other main partners **Volvo**, **AkzoNobel**, **Ocean Family Foundation**, **Stena Recycling** and **Bluewater** are all 100% committed to Ocean Health, preventing plastic pollution, sustainability management and sustainable development.

With their support we were able to take an incredible sustainability journey around the world.

11th Hour Racing's support of the Race also extended to being a Principal Race Partner and a sponsor of Vestas 11th Hour Racing. This team was highly committed to sustainability, including huge efforts to reduce and track their team's carbon footprint, which was offset at the end of the Race.

Partnership support, in particular that of the Mirpuri Foundation, also enabled the formation of the Turn The Tide on Plastic Race Team, skippered by Dee Caffari.

This, along with our alignment with **UN Environment** and their **Clean Seas** programme, offered a high-profile and unstoppable message for Ocean Health with a focus on plastic pollution, as the teams raced around the world.

At a local level our stopovers also partnered with NGOs, programmes and campaigns to further amplify and offer a local voice to our mission.

It comes down to all of us

Participation in tackling sustainability management and interest in our Ocean Health and plastic pollution campaign was overwhelmingly positive.

Our Race Villages and on-water action is produced in partnership with our host cities, who in turn appoint an organisation that handles the delivery of the project locally (our 'delivery partner'). Using the event as a hallmark event, our host cities then secure local content, sponsors and activations.

The host cities have autonomy when it comes to practical delivery of the Race Village and local activities. Our requirements are specified in agreements with the Host Cities, however these contracts were drawn long before our detailed Sustainability Programme was established. We were in a similar situation with teams and other partners, sponsors and suppliers. While this caused some challenges as budgets, agreements and plans were already in place, almost everyone was willing to adapt to improve the sustainability performance of their corner of the Race and are eagerly looking at how together we can make improvements in future races.

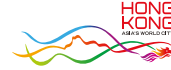
To realise our sustainability ambitions we needed involvement and commitment from a huge range of people.

Achieving our success was only due to the overwhelming interest and support of the Race's extended family.

VOLVO

Host Cities

Fly-by



Race Partners

Official Timekeeper



Race Sponsors



Race Suppliers



Race Teams



Sustainability Partners

Founding Principal Partner

Principal Partner

Main Partners

We Support



Our tactical approach

Our approach focussed on inspiring people about ocean plastic pollution prevention and sustainable event management (if they didn't already need it!) and then enabling them to do the best they could, by providing the knowledge and resources they might need.

We kept in close contact with everyone who had a part to play. With twelve locations, and a workforce in the thousands, we targeted critical influencers who would then influence their own stakeholders.

For teams, delivery partners, caterers, sponsors and commercial partners, we provided checklists, guides and other tools to help them navigate the most sustainable options.

Our delivery partners were the most critical people to have on board. Through direct collaboration with the designated sustainability contact and through the ongoing and wide-ranging interactions of our Head of Host Cities with each of our delivery partners, we were able to propagate our sustainability message.

We also identified a primary sustainability advocate within each of the sailing teams, usually the team manager, shore operations manager or logistics manager. **Vestas 11th Hour Racing** were a standout, with a dedicated Sustainability Manager. See their [Sustainability Report](#).

Our client services managers who liaise directly with our partners were our primary conduits to all of the partners and sponsors involved with the Race.

Our strategy was to embed sustainability management and support for sustainable development within the Race's functional areas, special projects and physical locations, in collaboration with our delivery partners, host cities and stakeholders' activations.

While sustainability management is achieved through the planning and project execution of each of these functional areas and groups, the Sustainability Programme is stewarded by the Sustainability Team.

Communicating for and about sustainability was given special focus as influencing the hearts and minds of people is the key to success.

Read more on our approach to supporting and enabling our host cities in the '[Supporting success](#)' case study.

Maximise our impact

Minimise our footprint

Leave a positive legacy



Commitment, engagement and satisfaction



Advocacy and outreach



Inclusivity, diversity and safety



Environmental protection



Responsible resource use



Climate change impacts



Information and science



Innovation and solutions



Knowledge and excellence

Planning for success

In planning our Sustainability Programme for the 2017-18 Race we took a strategic approach to more formally integrate sustainability and our support for Ocean Health across the Race and all of our stopover locations.

To be successful and really make a difference, we realised we needed a pragmatic approach. We decided to establish one clear theme, easy to communicate and easy for all our stakeholders, Race fans and followers on a global and local scale to align with. Therefore, Ocean Health with a focus on plastic pollution was front and centre of our Sustainability Programme.

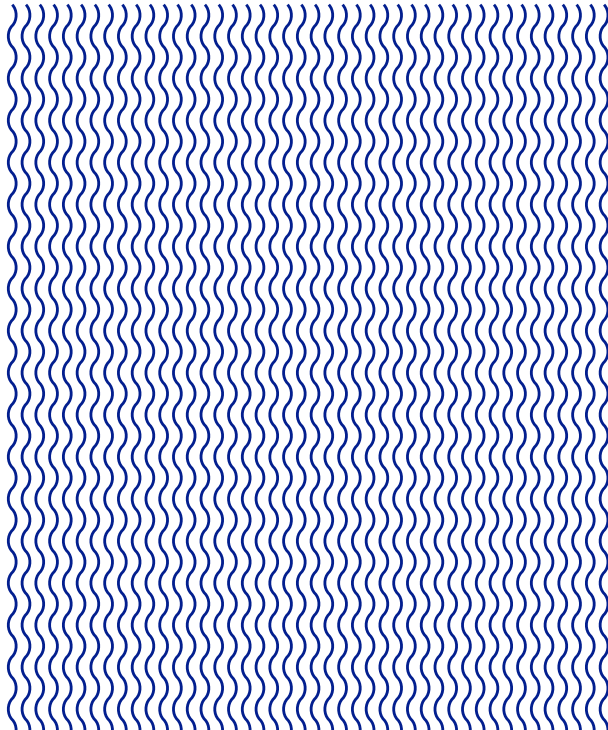
The aim of our approach was to activate discussion, leverage the global platform the Race offers, and create local relevance through our host cities.

Featuring high-quality narratives and real, respected characters, we had the ability to drive conversation and raise awareness of this ever-growing issue.

We thought 'ocean first' in everything we did, and this informed our actions and decisions from a planning and operational viewpoint, and directed our key public messages.

But of course we could not talk about what others should do to support Ocean Health and reduce their own negative impacts on the environment, without considering our own footprint. There is an imperative that our events embrace sustainable production practices, so in parallel with our campaigning, we expanded our remit to rigorously look at how we could improve the sustainability performance of the Race and our Race Villages.

In creating our sustainability strategy, we identified three directives: to maximise our **impact**, minimise our **footprint** and of course to leave a positive **legacy**.



Our sustainability framework

See an index of our objectives in the [Appendix](#).

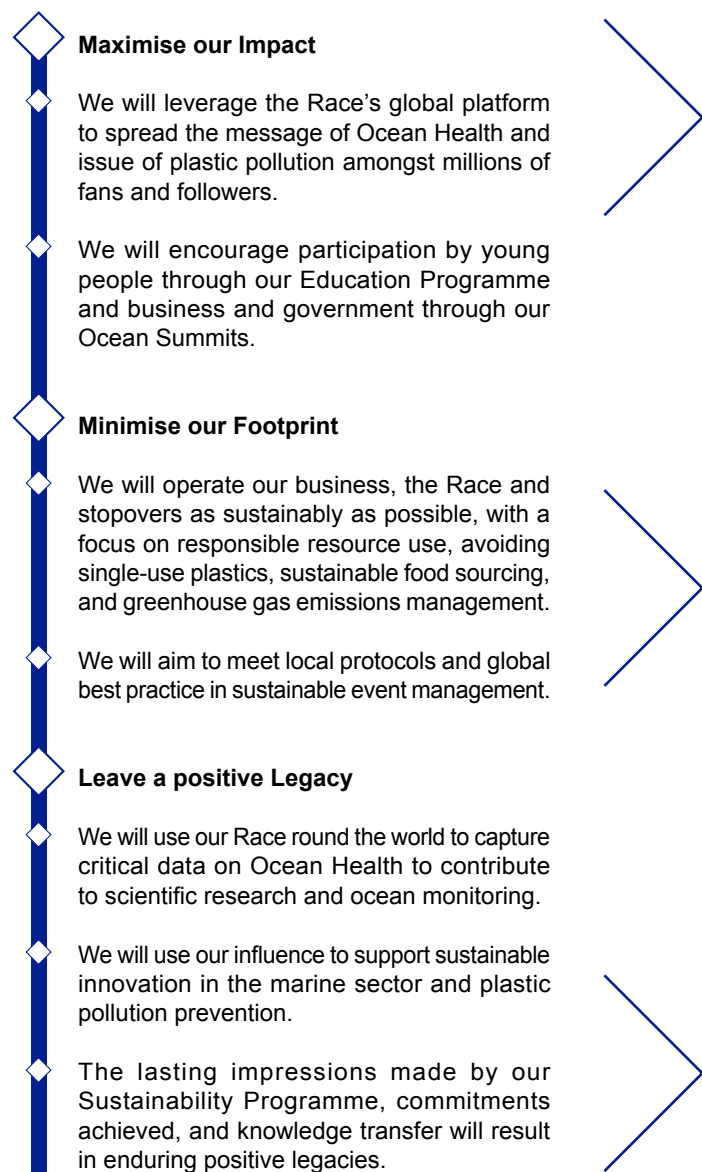
In consultation with our workforce, partners, teams and host cities, we identified **three clear directives**, **five key areas**, **nine core themes** and **twelve objectives**, to guide our Sustainability Programme efforts.

Our objectives drill down into further sub-objectives and measurable targets, which are explored in the following pages of this report, including our performance against these objectives and targets.

We aligned our strategy, objectives and reporting with the **Global Reporting Initiative (GRI)**. See our GRI disclosure indexing throughout this report. We also of course support the **UN Sustainable Development Goals** and have indicated throughout the report where these alignments occur.

To ensure we have embedded sustainability thoroughly we have taken a systematic approach to sustainability management, implementing a sustainability framework which is in alignment with **ISO 20121: Event Sustainability Management Systems**.

We have internally audited our management system and believe we comply with all of the requirements. We will seek external assessment of our management system as our Sustainability Programme matures.



Engagement and Advocacy

Engage internal and external stakeholders in our Sustainability Programme. Utilise the race to advocate for Ocean Health and preventing plastic pollution. Engage young people through our Education Programme and business and government through our Ocean Summits.

Race and Race Village Operations

Conduct the Race and produce the Race Villages in line with sustainable event management principles. Meet local sustainability requirements and international best practice, including implementing ISO 20121. Promote sustainable stopovers and tourism.

Sourcing and Resource Conservation

Source conservatively, with environmental and social responsibility. Support local suppliers. Source from sustainable fisheries. Promote healthy eating. Focus on resource recovery. Avoid the use of single-use plastics.

Transport and Greenhouse Emissions

Estimate programme freight and flight requirements and design-in ways to reduce this impact. Encourage sustainable transport uptake by all stakeholders. Measure and report GHGs. Review carbon balancing options.

Science and Sustainability Innovation

Influence lasting change to policies and practices relating to disposable plastics use and plastic pollution control. We will capture critical data while at sea and contribute to scientific understanding of the oceans in the most remote areas of the planet. Support sustainable sailing boat design and innovation.



Sustainable development

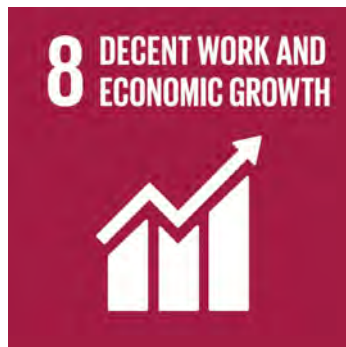
We have aligned our efforts with the Sustainable Development Goals and our reporting structure is guided by the Global Reporting Initiative and their Event Organizers Sector Supplement.

The seventeen Sustainable Development Goals (SDGs) were established by the UN as the framework for the 2030 Agenda for Sustainable Development. By focussing on these key global sustainability challenges, organisations can frame their approach to and support of sustainable global development.

Our Sustainability Programme aligns tightly with many of the SDGs, and our Ocean Health and plastic pollution focus of course aligns directly with SDG 12 Responsible Consumption and Production and SDG 14 Life Below Water.

Our principles reflect sustainable development protocols such as:

- [Sustainable Development Goals](#)
- [UN Global Compact](#)
- [Global Reporting Initiative](#) (Event Organizers Sector Supplement)
- [ISO 20121: Event Sustainability Management System](#)
- [World Sailing's Sustainability Agenda 2030](#)



We ensure a safe, fair and satisfying work environment and seek the same through our supply chain.

We work with Host Cities to realise economic benefits from our stopover.



We support and promote sustainable transport, active travel and urban connectivity.

We support and offer exposure to innovative solutions to sustainable development, Ocean Health, plastic pollution prevention and sustainable event production solutions.



We support smart cities that have good urban connectivity, air quality, fair working conditions, sustainable development policies, enable a circular economy and have a commitment to reducing plastic pollution.

We offer an opportunity to showcase sustainable city innovations within our Race Villages and as it relates to Ocean Health, through our Ocean Summits.



We support responsible resource use and strive to enact this through our procurement choices.

We focus on resource recovery in support of a circular economy.

We have a focus on avoiding and campaigning for awareness of the impact of single-use plastic.



We ensure our Race and Race Villages are inclusive, welcoming and safe.

We promote healthy and active lifestyles and ensure healthy food is served.

Read more on our SDG alignment in the [Appendix](#).



We support quality education by providing education resources on Ocean Health, environmental protection and prevention of plastic pollution.



We promote an inclusive race and working environment.

We actively work to ensure gender balance in our race teams and our workforce.



Our Race and Race Villages are managed to ensure no negative impact on freshwater supply.

We work to source only from companies who do the same.



We promote renewable energy and energy conservation, enacted through our efforts in production of our Race Villages and through our race teams.



We understand there is a greenhouse gas emissions impact of a global travelling event.

We measure our impact and are working hard on efficiency, reductions and balancing of our impacts.

We work with science, academia and industry to collect scientific data on Ocean Health and the effects of climate change on the ocean.



Our campaign to restore Ocean Health with a focus on plastic pollution underscores all of our environmental and sustainability actions and direction as a race.

Our engagement with stakeholders comes with expectations for them to make commitments and take action.

We aim to maximise our impact in this area while also carefully managing our own plastic footprint and impact on the ocean.



We know that Ocean Health impacts begin on land and so our attention is also to what systems and solutions there are on land that can positively impact Ocean Health.

In our sourcing, we look to the supply chain to consider the potential impacts of these sectors and strive to make purchase decisions that support good practice.



At the heart of our Ocean Health campaign and Sustainability Programme is collaboration with our stakeholders and others working on solutions to a sustainable future. We collaborate with our partners, UN Environment, our host cities and delivery partners, the scientific and education sectors, NGOs and ocean advocates.

We connect with local organisations and offer a forum for collaboration through our Ocean Summits.



Maximise our impact

Underlying all our efforts within the Sustainability Programme was to be a catalyst to restore Ocean Health with a focus on plastic pollution.

Using the powerful platform of the Race, we were able to reach tens of millions of people around the world, including online fans and followers. It could also educate thousands of schoolchildren, through an exciting, curriculum-based, Education Programme.

How did we maximise our impact?

More than one million single-use plastic bottles are sold every minute and a shocking eight million tonne of plastic pollute our seas each year.*

The 2017-18 edition of the Race offered a unique opportunity to connect this urgent issue with a high-profile sporting event that uses the ocean as its racetrack.

By crossing some of the most remote oceans on earth, the seven teams were able to highlight the impacts plastic pollution and other issues were having on the health of our blue planet.

To do this, the Race devised a Sustainability Programme to maximise our global impact and act as a catalyst for real change by helping governments, businesses and individuals understand the role they had to play in resolving this ocean crisis.

In collaboration with Founding Principal Sustainability Partner 11th Hour Racing, Principal Partner the Mirpuri Foundation, and our other main partners, Volvo, AkzoNobel, Bluewater, Stena Recycling

and Ocean Family Foundation, the programme aligned to the UN Sustainable Development Goal number 14 Life Below Water with the objectives to educate, innovate and leave a lasting legacy.

To advance science by combining it with sailing, an expert scientific consortium, funded by Volvo Cars, used cutting edge technology to build state of the art equipment that would capture the most relevant ocean data.

This included information on the global spread of microplastics, ways a changing climate is affecting Ocean Health and how oceanographic data can improve our understanding of the link between the ocean and weather patterns.

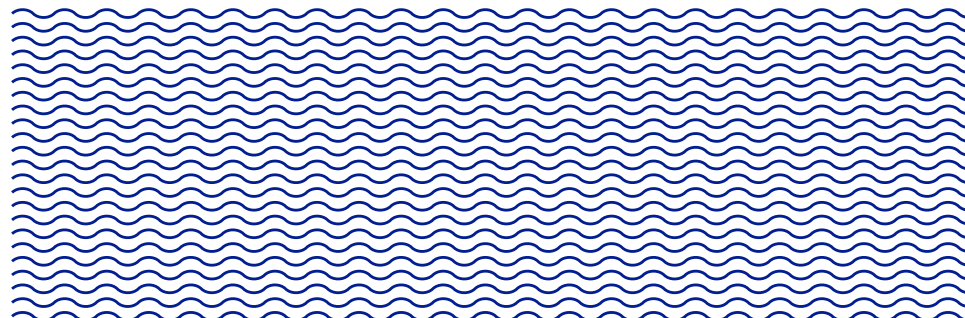
Convening a series of Ocean Summits and workshops, at key host cities, the problems linked to our seas were discussed by key influencers, such as politicians, scientists and business leaders, and innovative solutions proposed to shift current thinking and engender positive action.

Joining forces with UN Environment's #CleanSeas campaign further strengthened our message and offered a platform for public commitments and pledges on how governments, businesses and individuals could commit to reduce their reliance on plastic.

* Sources:

8 millions tonnes per year - Plastic waste inputs from land into the ocean; Jenna R. Jambeck et al, Science, 13 Feb 2015

1 million plastic bottles per minute - Euromonitor International; Global Packaging Trends Report 2017



Commitment, engagement and satisfaction

Engaging stakeholders to join us on our sustainability voyage



Photo: James Tomlinson/Volvo Ocean Race

We cannot do this alone. Our aim was for the Race to inspire action on plastic pollution prevention and work with our stakeholders on a sustainable future for all.

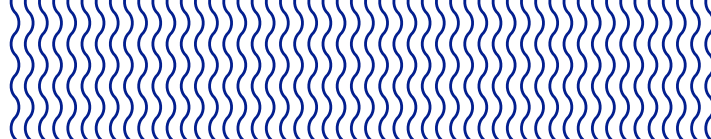


Photo: Jesús Renedo/Volvo Ocean Race



EO11 Number, type and impact of sustainability initiatives designed to raise awareness, share knowledge and impact on behaviour change and results achieved.

EO12 Nature and extent of knowledge transfer of best practice and lessons learned.

GRI 413 Operations with local community engagement, impact assessments, and development programs

Our objective

We will engage and obtain commitment by stakeholders in the Race's Sustainability Strategy.



Charting our course

We set down these objectives to guide our efforts in engaging and including stakeholders in our Sustainability Programme, with the underlying ambition of inspiring them to get on board and take action to:

- Obtain commitment to Ocean Health and preventing plastic pollution by stakeholders.
- Engage active participation in the Race's Sustainability Strategy by all functional areas, operational stakeholders and major suppliers.
- Ensure the participation experience of workforce, teams, stakeholders and visitors meets their expectations.

Why this?

Without the involvement and commitment of our staff, host cities, partners, sponsors, teams, guests, fans and followers, we could not succeed in our ambition to influence policy and inspire action on Ocean Health, plastic pollution prevention and responsible resource use.

Our tactical approach

Our campaign on Ocean Health and plastic pollution (Clean Seas, Education, Ocean Summits, Science) gave us the focal point to contextualise our discussions on sustainability with stakeholders. The first tactic was to **inspire interest** and a **personal connection** to the issues, and instil a sense of the solutions being in their hands.

We 'socialised' sustainability and the various programme elements throughout the organisation and with our stakeholders by **relentless positive agitation!**

The next tactic was to **enable action** by everyone within their own area of control. We did that through providing the knowledge, tools and protocols they would need. Apart from meetings and workshops we provided checklists, technical expertise, guidance, tips and solutions.

The final tactic was to ensure that the sustainability team were seen as a **supporting resource** to stakeholders, to help enable us to all reach our joint ambition of restoring rather than negatively impacting Ocean Health, and to minimise our own footprint.



Our success targets

100% of teams, staff, partners and suppliers sign a pledge to protect Ocean Health and not use single-use plastics.

100% of all Race functional areas, stakeholders and major suppliers to demonstrate active participation in Sustainability Strategy through their plans, decisions, and actions.

Review our performance against these targets in the [Appendix](#).

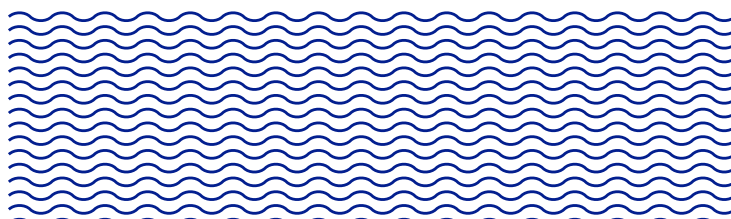




Photo: Brian Carlin/Volvo Ocean Race

We recognised there are a huge number of people and groups that can come on the sustainability journey with us. They either have a critical role to play in reducing the footprint of the race or are targets in our campaign to restore Ocean Health and to prevent plastic pollution.

Our strategy focussed on inspiring and enabling people to take action to reduce their plastic footprints and to support our campaign for Ocean Health.

We held programmes for our sailors, travelling event staff, local events producers, volunteers, sponsors, plus the event and sports sectors.

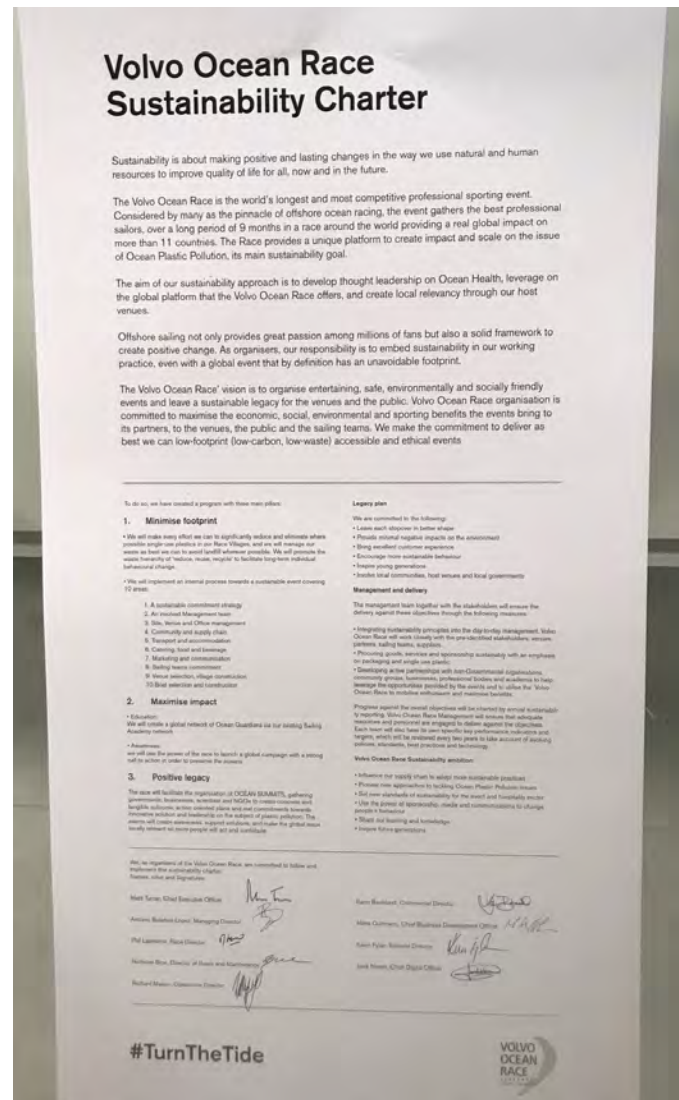
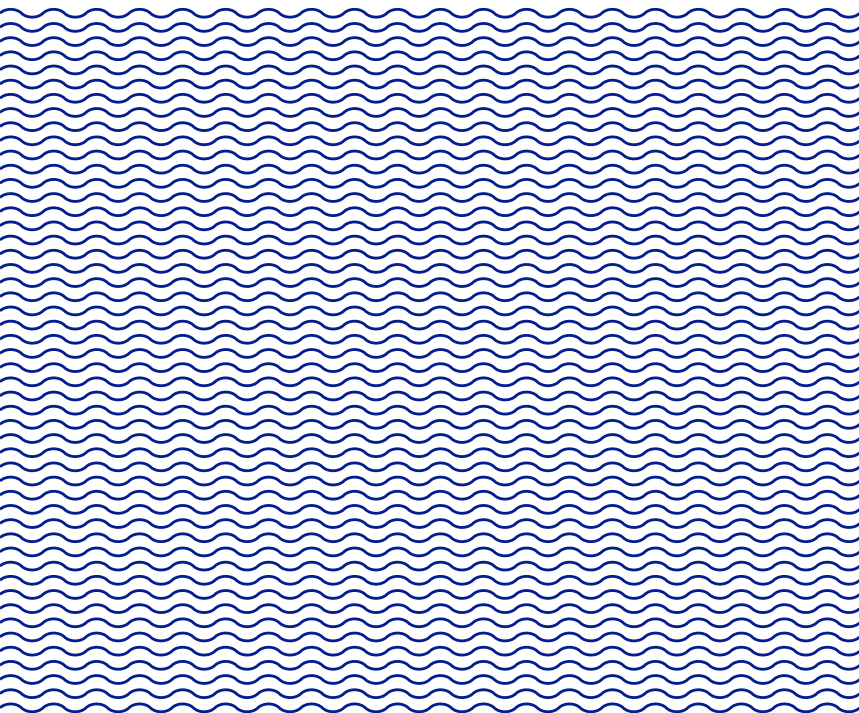
Following are examples of our efforts to engage our stakeholders in the Sustainability Programme. Further examples are throughout the report.

Our organisation

Our Board and Leadership Team were committed to the sustainable management of the Race and using it as a platform to amplify our Ocean Health and plastic pollution campaign. Without their endorsement and provision of resources, our programme could not have been so successful.

Our Leadership Team signed the Race's **Sustainability Charter** which sets out their commitments to sustainability.

To engage our event staff, a **Green Team** was formed within the organisation to bring the concepts to the event staff and encourage the various departments to take action within their own functional areas. Meetings were held to facilitate collaboration and innovation, and as a forum to discuss progress and report on results. In each functional area's operational plans sustainability was considered.



Event staff engagement events

Throughout the Race we arranged activities to further engage our event staff and travelling stakeholders.

This included a film screening of Chasing Coral in **Cape Town**, a plastic reduction workshop in Itajaí, and a sustainability-focused pub quiz (very popular) in Auckland.

On **World Environment Day**, June 6, 2018, coinciding with our **Cardiff** stopover, we promoted **One Plastic Free Day** to our staff in association with A Plastic Planet. Staff pledged to go plastic free for the day and to activate the idea on social media. Pictured is our Volunteer Manager who really got behind the programme!

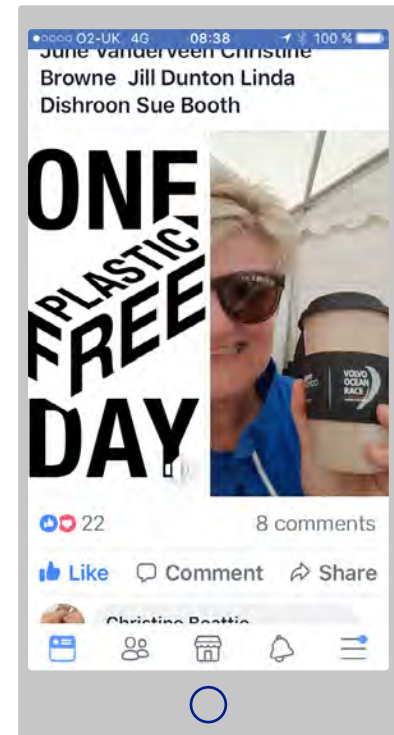


Photo: Ainhoa Sánchez/Volvo Ocean Race

Host cities and delivery partners

Whilst there were no formal inclusions in Host City contracts for sustainability management of Race Villages or for inclusion of Ocean Health or plastic pollution messaging, all Host Cities and delivery partners supported our endeavours.

Where human or financial resources were not able to be allocated by the delivery partner, we supported with additional services and resources.

We produced guidance and checklists to support good decision-making on areas that would affect the operational footprint (especially plastic footprint) of the Race Villages.

Stopover partners included information, installations, and activations around Ocean Health and plastic pollution within the Race Village, and as part of the schools visits.

Service-ware and plastics guide

Re-usable + washable
The most sustainable option is of course reusable and washable service-ware. If this is possible, then without a doubt go ahead! Remember to use environmentally preferable detergent.

If washing-up is a challenge, talk to organisers in case a solution can be devised.

Reusables can be sourced from local if companies or go with special event cups

Globalist | EcoCup | Steels

Compostable plat
We are aiming to have compostable disposable service-ware should options manufactured as local options manufactured as local options

- ☑ Sugar cane fibre
- ☑ Palm leaf plates
- ☑ Unbleached paper

Click through for each! Beware of unverified!

Europe: (Biotin) UK: (EcoCup) Australia: (Beef USA: (EcoCup)

Beware
Purchase and for the or them

SOLUTION

- Reusable bottles, re-usable cups, paper cups
- Reusable or compostable service-ware
- Re-usable or compostable disposable cutlery
- Re-usable or wooden/wooden (or bamboo) straws
- Do not provide straws, wooden (or PLA) straws
- Do not provide lids, PLA lids (use PLA lids)
- Return the boxes to supplier, supplier has also
- None permitted onsite - use bulk dispensing

ITEM

- Single use plastic beverage bottles and cups
- Disposable plastic food service-ware
- Disposable plastic cutlery
- Straws and lids
- Coffee cup lids
- Polythene delivery boxes
- Single serve sachets

Sustainable catering

Food and beverage service at Volvo Ocean Race is a highly visible demonstration of our commitment to sustainability. The food we serve shows how much we care for our visitor's health and the environment where ingredients are sourced.

Food service is the perfect platform to promote sustainable food systems locally. From paddock to plate, we can highlight local sustainable farming, seasonal produce, and the benefits of ethical and fair trade. We can use food to kick-start discussions on subjects such as sustainable fisheries and the impacts of unethically sourced fish, human health and prosperity.

Caters and food stallholders that provide healthy, fresh, seasonal, local, fair, culturally appropriate, dietary diverse and responsibly grown food add to the Race's overall sustainability credentials.

There will not always be one 'right' way to the most 'sustainable' food option. Local context comes in to play, such as climate, what is sustainably produced locally, and the predominant issues to consider when planning food service.

Local + Seasonal
Sourcing locally and seasonally supports local producers. Short-travelled food also drastically reduces the transport and greenhouse gas emissions impact of your food.

- ☑ Source locally produced ingredients.
- ☑ Plan menus around availability of local seasonal produce.

Ethical + Sustainable
Animal products should be from sources which meet recognised standards of animal welfare and sustainable farming practices.

- ☑ Beef is from pasture-fed, not grain-fed feedlot practices.
- ☑ Pork is from free-range pigs and no gestation crates.
- ☑ Poultry and egg sources are free range and hormone-free.
- ☑ Seafood is from sustainable fisheries (see Page 3)
- ☑ Sustainable farming and harvesting practices are used.

Non-toxic + Eco-labelled
Eco-labelling helps you make the most environmentally preferable products. Various programs will have certain requirements from agricultural and animal husbandry practices through to manufacture and packaging. Search for a food supplier that manufactures and certifies for a food supplier on their journey towards better than fully certified from far away. Support local farmers!

- ☑ Choose organic and/or eco-labelled ingredients.
- ☑ Support chemical-free local producers.
- ☑ Choose non-genetically modified ingredients (GMO).
- ☑ Choose food that has not been irradiated.

Fair + Safe
There are some food sourcing sectors that are at risk of unethical trade and labour practices. Be assured you have sourced from suppliers that treat their workers and suppliers fairly and safely.

- ☑ Coffee, tea and chocolate are from fair trade sources.
- ☑ Seafood is not from fisheries with known labour abuses.
- ☑ Bananas and sugar are ethically sourced.
- ☑ Local farming co-operatives are supported.

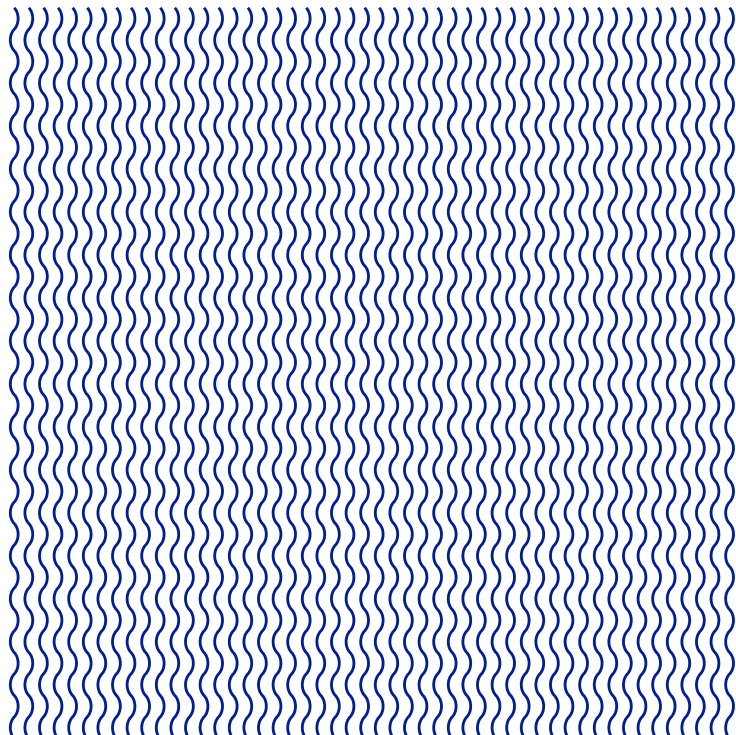
Inclusive + healthy
Serving healthy and fresh food is of course the goal. Food should cater for all anticipated dietary needs and be appropriate given any cultural or religious requirements.

- ☑ Healthy and fresh options are available.
- ☑ Cultural or religious requirements are catered for.
- ☑ Dietary requirements are catered for.
- ☑ Avoid sugar-filled drinks as your go-to beverage option.

Sustainable catering hitlist

- ☑ Local and seasonal ingredients
- ☑ Organic ingredients
- ☑ Free range eggs
- ☑ Sustainable seafood
- ☑ Fair trade coffee, tea, chocolate
- ☑ Vegetarian, gluten free, vegan options
- ☑ Religious and cultural dietary requirements
- ☑ Healthy, fresh, unprocessed
- ☑ Reduce packaging, no plastic, sachets, or straws
- ☑ Non-toxic cleaning supplies.
- ☑ Reduce food waste
- ☑ Donate un-served food to charity
- ☑ Separate kitchen scraps for composting.
- ☑ Collect waste cooking oil for recycling.
- ☑ Recycle!
- ☑ Promote your sustainable sourcing success!
- ☑ Use food to kick start sustainability discussion

VOLVO OCEAN RACE
RACING THE WORLD



Race Teams

Our engagement with team management, shore crew and sailors around sustainability had a particular focus. We needed the race teams to embrace sustainable shore operations, and for sailors to become advocates for Ocean Health. Teams were supported with information, inspiration, and resources. A special half-day engagement and workshop session was held in Lisbon during the pre-Race period.

All teams signed the **Race Teams Sustainability Charter**. Our skippers also attended the Ocean Summit in The Hague to talk about their experience during the Race, the Sustainability Programme and their reflections on ocean plastic pollution.

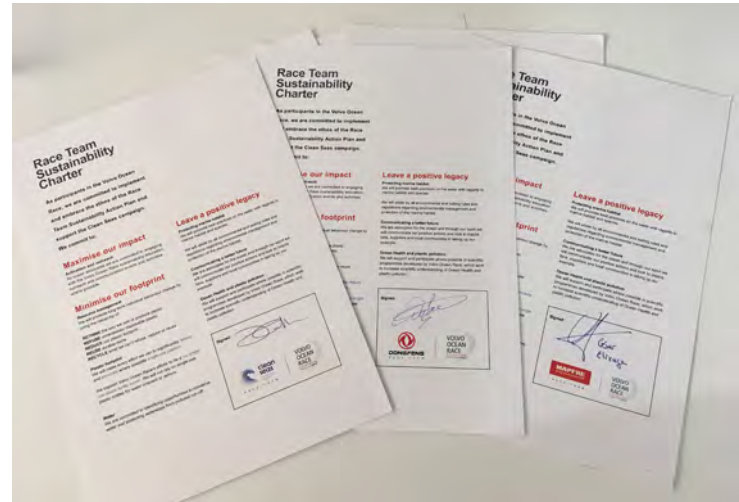


Photo: Jen Edney/Volvo Ocean Race

“I did the logistics for MAPFRE and for starters we stopped buying plastic bottles and used the big water fountains which translated into my daily life of refilling bottles and reusing more plastic things. Everyone in the team was much more aware and happier to help reducing plastic and also recycling than they did at the beginning of the campaign.”

Maria Bertrand, Logistics Manager,
MAPFRE Race Team.

Partners, sponsors and suppliers

We worked with our commercial partners, and those of teams and host cities, to ensure their involvement in the Race had a minimal footprint. This included provision of guidance and checklists, personal follow up, inclusion in Ocean Summits, encouraging them to sign up to Clean Seas and inviting them to profile their own single-use plastic reduction strategies.



Paulo Mirpuri (centre), and Hi Fly staff sign to Clean Seas, with Volvo Ocean Race's co-President Johan Salen.

Photo: Jesús Renedo/Volvo Ocean Race

“The breadth and depth of the Sustainability Programme was, and continues to be, astounding. It was rewarding, fulfilling and fun.”

Lynne Elliot, Communications Manager - Europe,
GAC Pindar.

Volunteers

With 4,300 volunteers across our twelve destinations, they had a special focus in our engagement efforts. We wanted to not only have them be exposed to the issues and inspired to take action in their everyday lives, but to also be advocates for our campaign within the Race Village and beyond.

We included information in the Volunteer handbook, in their welcome presentations and inductions, and engaged them especially on avoiding single-use plastic water bottles by providing all volunteers with a Clean Seas branded refillable water bottle.



Photo: Jen Edney/Volvo Ocean Race

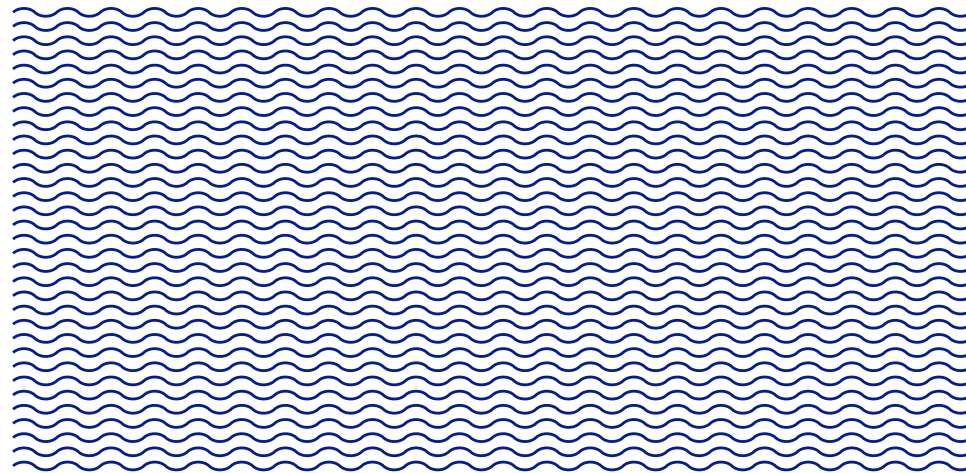


Photo: Deb Porter/Volvo Ocean Race

Sustainable Stopover Guide

For each stopover we produced a guide that featured the sustainability highlights of the destination and what was happening within the Race Village. We invited all stakeholders to have a 'sustainable stopover'.

View the [Guides](#).



“I think the Sustainability Programme has been great to raise awareness and to get people and communities to commit to change.

Myself, I am more aware of my daily use of single-use plastics in work and privately. When I see companies/ stores adding unnecessary amount of packaging or don't provide good recycling abilities I speak up and ask to file a complaint. I teach my kids the importance of recycling and avoiding unnecessary plastic, we have reusable water bottles. We have had some miniature family beach activities on our holidays and I am active on social media to raise awareness on the issue.

Keep up the good work, if it can be even more visible - great!”

Susanne Karlsson, Global Brand Manager,
Volvo Construction Equipment.

Advocacy and outreach

Promoting Ocean Health with a
focus on plastic pollution



Photo: Jesús Renedo/Volvo Ocean Race

We used our powerful platform and global exposure to raise awareness and advocate for action. We hoped to inspire government, companies, cities, communities, adults and kids to commit to play their part in restoring ocean health.

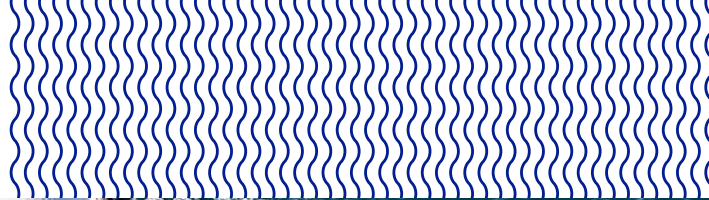


Photo: Ainhoa Sánchez/Volvo Ocean Race



EO11 Number, type and impact of sustainability initiatives designed to raise awareness, share knowledge and impact on behaviour change and results achieved.

GRI 413 Operations with local community engagement, impact assessments, and development programs.

Our objective

Increase awareness, provide education, and campaign for Ocean Health with a focus on plastic pollution.



Charting our course

In focussing on how we can maximise our impact, we set these objectives to achieve our ambition:

- Align with and offer exposure to Ocean Health and plastic pollution prevention programmes, campaigns and innovations.
- Use the power of media and communications to change people's behaviour, specifically on plastic consumption and waste.
- Ensure attendance at Ocean Summits by relevant and influential organisations and individuals.
- Engage educators and young students in the Race, Ocean Health and plastic pollution.

Why this?

With the Ocean as our racetrack and playing field, there is a natural and logical fit between the Race and Ocean Health.

The Race has a global appeal, had millions of Race Village visitors and has tens of millions of fans and followers.

Our stopovers gave us the chance to influence government and Host Cities, with the Ocean Summits offering a focus point for commitment deadlines.

Our partnerships, sponsorships and the corporate hospitality programme gave the opportunity to engage with decision makers who can influence policy and action within their own organisations.

The Race and our Ocean Health and plastic pollution campaign offered the perfect subject matter for our Education Programme.

Our impact in numbers

20,000

people signed the Clean Seas pledge through our campaign: our hosts New Zealand, Spain, Wales, State of Rhode Island, City of Itajaí and City of Newport

114,000

school children and adults participated in our Ocean Health and plastic pollution Education Programme

2,000

decision makers attended our seven Ocean Summits to hear from 225 expert speakers

40

countries participated in our Ocean Health and plastic pollution Education Programme

Our tactical approach

The first tactic was to decide on a single Ocean Health issue, which for us was plastic pollution. We chose a global and credible campaign partner in UN Environment's **Clean Seas** to align with. The 'non partisan' nature of Clean Seas allowed room for locally relevant NGOs and other campaigns to also be part of each stopover. The Clean Seas campaign encourages government, private sector and individuals to make a formal commitment to act.

Next, we created a race team aligned to the Ocean Health and plastic pollution campaign - **Turn the Tide on Plastic**. The boat's name is the strapline of the Clean Seas campaign.

Producing quality, consistent and **engaging stories** on Ocean Health and plastic pollution within the context of the Race was a key tactic. Featuring high-quality storytelling and real, respected characters, we had the ability to drive conversation and raise awareness of this ever-growing issue.

Our major tactic for enhancing knowledge, outreach, collaboration and enticing commitment and action, was the establishment of **Ocean Summits**, held in seven of our destinations. They brought together the worlds of sport, government, science, ocean advocacy (NGOs and campaigns) and, importantly, industry and business to discuss innovative solutions to the global crisis of ocean plastic pollution.

Creating the **Education Programme** on Ocean Health and plastic pollution was our tactic to reach out to young people, parents and educators. The programme provides a comprehensive resource in seven languages. Available to freely download online, it has four modules, teacher's resources, education booklets, and student worksheets. Our education programme was delivered in our Race Villages as a workshop as part of the schools visit programme.

We used our Race Villages as **engagement points with people**. Through onsite activities, installations, signage, audio and visual messaging, and a troupe of engaged volunteers, direct outreach to people was our aim. This outreach included having local NGOs and campaigns present at the Race Village.

Additional **community outreach**, external to the Race Village was another tactic to engage with the community on the issue, such as schools visits by sailors and our Education Programme, and beach cleans.



Our success targets

Raising awareness and changing behaviour by pushing the 'Turn the Tide' message to 3 million visitors in our Host Cities globally.

Promoting UN Environment's 'Clean Seas / Turn the Tide on Plastic' campaign to our digital audience – including 1.2 million Facebook fans.

Using compelling storytelling and the race's significant media power to amplify the campaign – with a minimum goal of 30% of external media articles mentioning our Sustainability Programme.

Hosting 'Ocean Summits', gathering more than 2,000 decision makers and influencers from business, government and science to make commitments to Ocean Health.

Developing an Education Programme for children and teachers, with an initial delivery target of 25,000 students at Host Cities globally and online.

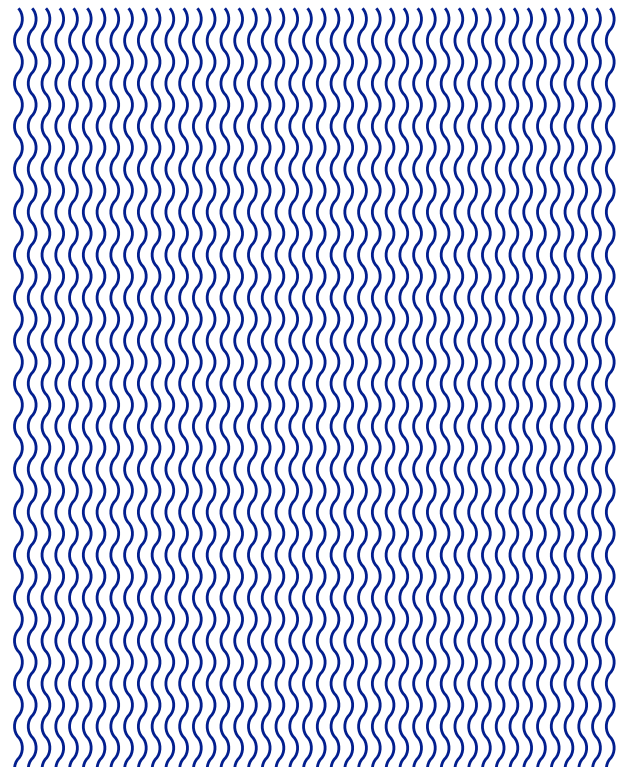
Review our performance against these targets in the [Appendix](#).

24,102

online articles were written on our Sustainability Programme

820,555,488

views of articles and videos produced for our Sustainability Programme



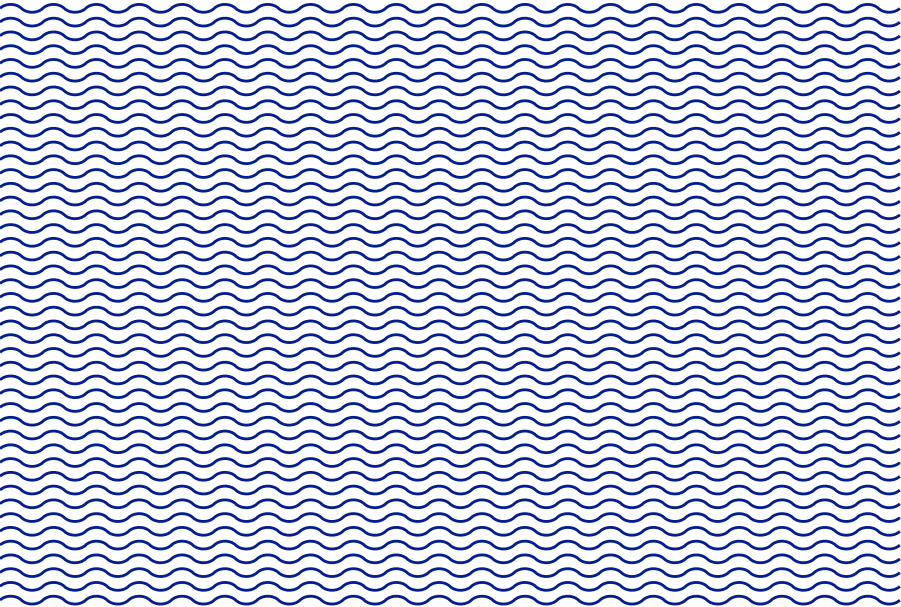


Photo: Jen Edney/Volvo Ocean Race

Following are examples of our efforts. Further examples are in the case studies at the end of the report.



In our mission to increase awareness, provide education and campaign to restore Ocean Health we were able to leverage our powerful platform and global exposure. This was within the Race Villages, through our communications platforms and through community engagement.

Power of the media and storytelling

We used our social media platforms and website to host stories and content on Ocean Health and plastic pollution relating them back to the Race.

With someone dedicated to delivering on our sustainability communications we were able to produce consistent, strategic and relevant content that was then amplified by media. Whilst this was of interest to the sailing media because of the broader interest on the issue it transcended the sector and was covered by mainstream channels.

We also made our audiences aware of the latest news on ocean plastic pollution through our social media channels to provide further context of the fast moving topic.

The **Science Programme** and particularly the microplastic data collection initiative were considered particularly newsworthy because, for the first time, an ocean race was also acting as a vehicle for groundbreaking scientific data on the global spread of microplastic in places where no information previously existed.

The partnership of team Turn the Tide on Plastic with **Sky Ocean Rescue** and Sky News offered added amplification of the Clean Seas campaign.

The programme used print, online and broadcast media to communicate our message on plastic pollution.

Publications linked to the sport of sailing covered elements of the Sustainability Programme. The fact that the Race aligned a premier sporting event with a pressing environmental issue proved popular.

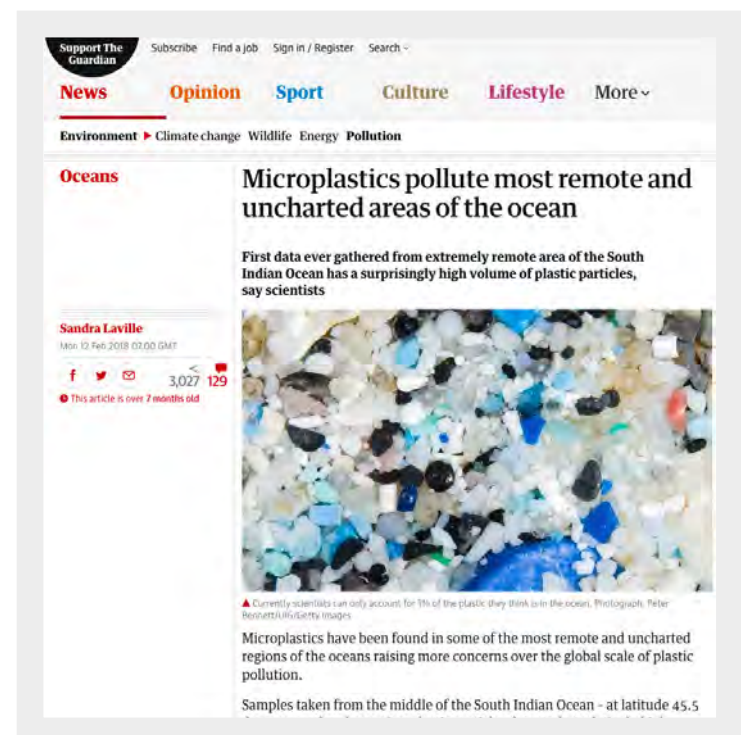
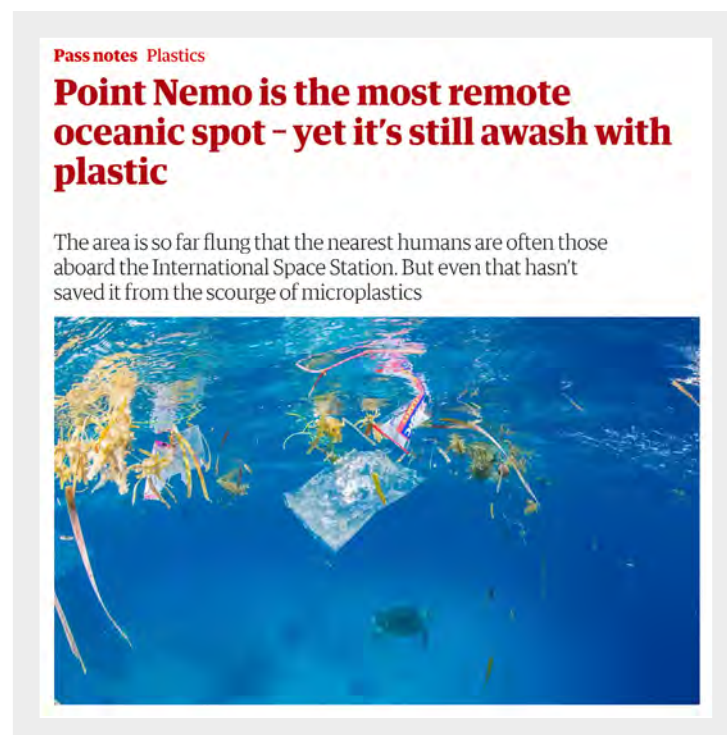
The resulting coverage, mainly focussing on the science content, was positive and on message.

The development of a cutting edge Scientific Programme also presented the opportunity to leverage the output into more mainstream media offering the opportunity to deliver our message on the impacts and solutions to a more mainstream and global audience. This linked to the boats when they were at sea as they were all helping to gather this information thus providing a connection between the race and our programme for sailing fans, media and digital audiences.

The strategic communications combined press releases and web stories, accompanied by compelling imagery, with bespoke digital collateral for platforms including Facebook and Twitter. Anne-Cecile Turner acted as main spokesperson for the programme but other members of the team, sailors and the scientists analysing the data, also responded to media requests, including radio and television interviews.

A compelling narrative, connecting sailors with science and providing new information on how microplastics had spread to the furthest reaches of our blue planet, brought the work to a new audience, including members of the general public, with no previous knowledge of the Race or the extent of the problem.

An audience of millions was exposed to the story through international media outlets providing considerable cut through and adding further legitimacy to this Science-based Programme.





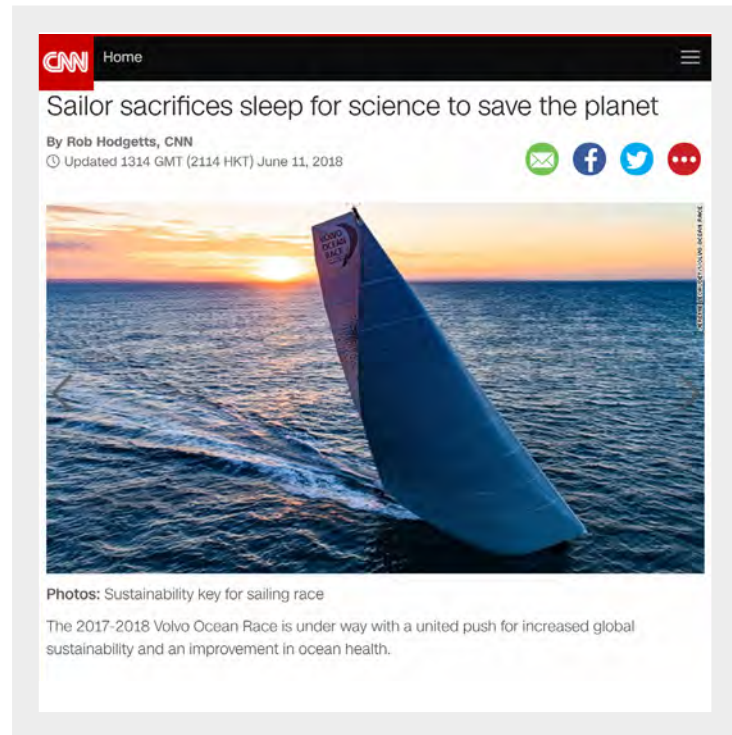
[Mail Online](#) is one of the world's leading news websites. By promoting Prince Charles video address to the conference on the issue of plastic pollution the event and the subject gained traction in over 250 media outlets across the globe.

The [CNN](#) report on Team AkzoNobel's Nicolai Sehested's extra onboard duties collecting scientifically analysed seawater samples added another dimension to the life of a sailor at sea. CNN's global reach and the positive tone of the story offered a deeper exploration of the subject whilst promoting the programmatic work by including interviews with Sehested and a race scientist.

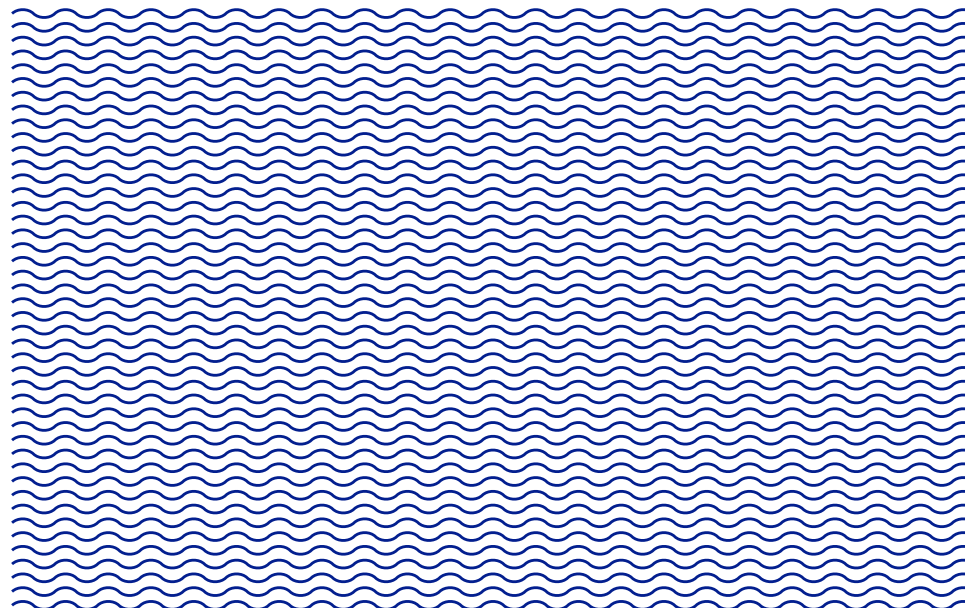
It was important to link the programme to the race and its sailors. Mark Towill from Vestas 11th Hour Racing proved to be a great spokesperson for the sustainability ambitions of the race when speaking to Sky News, one of the UK's top news channels.

[The Guardian](#) has a significant global reach through its website and the newspaper is distributed across the UK. Featuring the story on p3 of the paper and website the story about scientific efforts to chart microplastic contamination of the oceans, including a graphic of the spread at the time brought our message, backed up by race scientist quotes, to millions of people.

Programme leader Anne-Cecile Turner appeared live on BBC Breakfast which is watched by several million people each morning. Interviewed live from Cardiff, she talked about that day's upcoming Ocean Summit and highlighted the wider work of the Race to tackle ocean plastic.



A total of 24,102 online articles were published by us and other media outlets on our Sustainability Programme, attracting 820,555,488 online views.



Seeking commitment and action

As we raced round the world, our mission was to encourage companies, cities, states, and even entire countries to partner with Clean Seas and make their commitments to reduce their plastic footprint and to help fight ocean plastic pollution.

We've had mayors, governors and ministers sign their cities, states and countries up to the Clean Seas programme, announced at special events hosted by the Race or during our Ocean Summits.

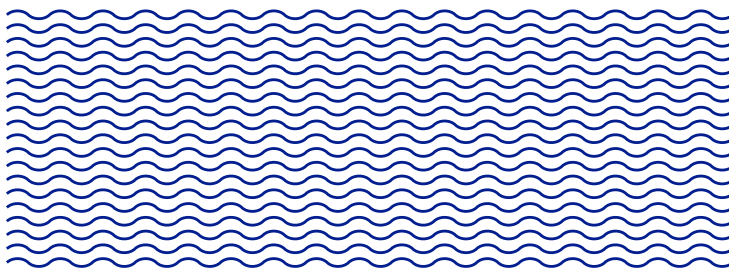
Race partners, sponsors and companies attending our Ocean Summits have signed the Clean Seas pledge, making commitments and setting ambitious single-use plastic reduction targets.

All of our race teams signed a sustainability charter, pledging to minimise their disposable plastic footprints in support of Clean Seas.

[Read more.](#)



Photo: Jesús Renedo/Volvo Ocean Race



“We have definitely created a template that other sporting organisations can use for their events because people love to come together for sports but no one really wants to be trashing the planet.

In this edition of the the Race, we have been able to have seven Ocean Summits around the world and we’ve filled the room with people who have the power to make the changes we need to see both on a local level and in a systemic way.

The summits have been a strong platform for corporate announcements such as Volvo Cars and Sky publicly announcing that their companies are going to change the way they use energy and resources.

The legacy of the Ocean Summits is going to be an increasing integration of the idea of sustainability into the sport of sailing. This is a fantastic platform to reach people all over the world.”

Wendy Schmidt, Co-Founder of 11th Hour Racing
and President of The Schmidt Family Foundation.



Ocean Summits

A series of Ocean Summits were devised so that at strategic stopovers the Race could bring together a range of key players from the worlds of sport, industry, government, science and passionate ocean advocates, to showcase innovative solutions to the global crisis of ocean plastic and to inspire action to help turn the tide on this urgent and most pressing issue.

The seven landmark summits took place at stopovers in Alicante, Cape Town, Hong Kong, Newport, Cardiff, Gothenburg and The Hague.

Collectively, the events saw regional and national governments, businesses and a range of ocean advocates lead by example, making solid commitments to help stop the ubiquitous spread of plastic in our seas.

Exclusive data on the amount of microplastics in our oceans collected by the race's Science Programme was also revealed at the stopovers.

Collectively our Ocean Summits included:

- ◆ 225 speakers.
- ◆ 1827 attendees.
- ◆ Three countries' announcements of commitment to the #CleanSeas campaign.
- ◆ The sign-up of Rhode Island, as the first US state, to the #CleanSeas campaign.
- ◆ 79 government attendees.
- ◆ Attendance by 377 businesses.
- ◆ Attendance by 148 NGO members.



Photo: Pedro Martínez/Volvo Ocean Race

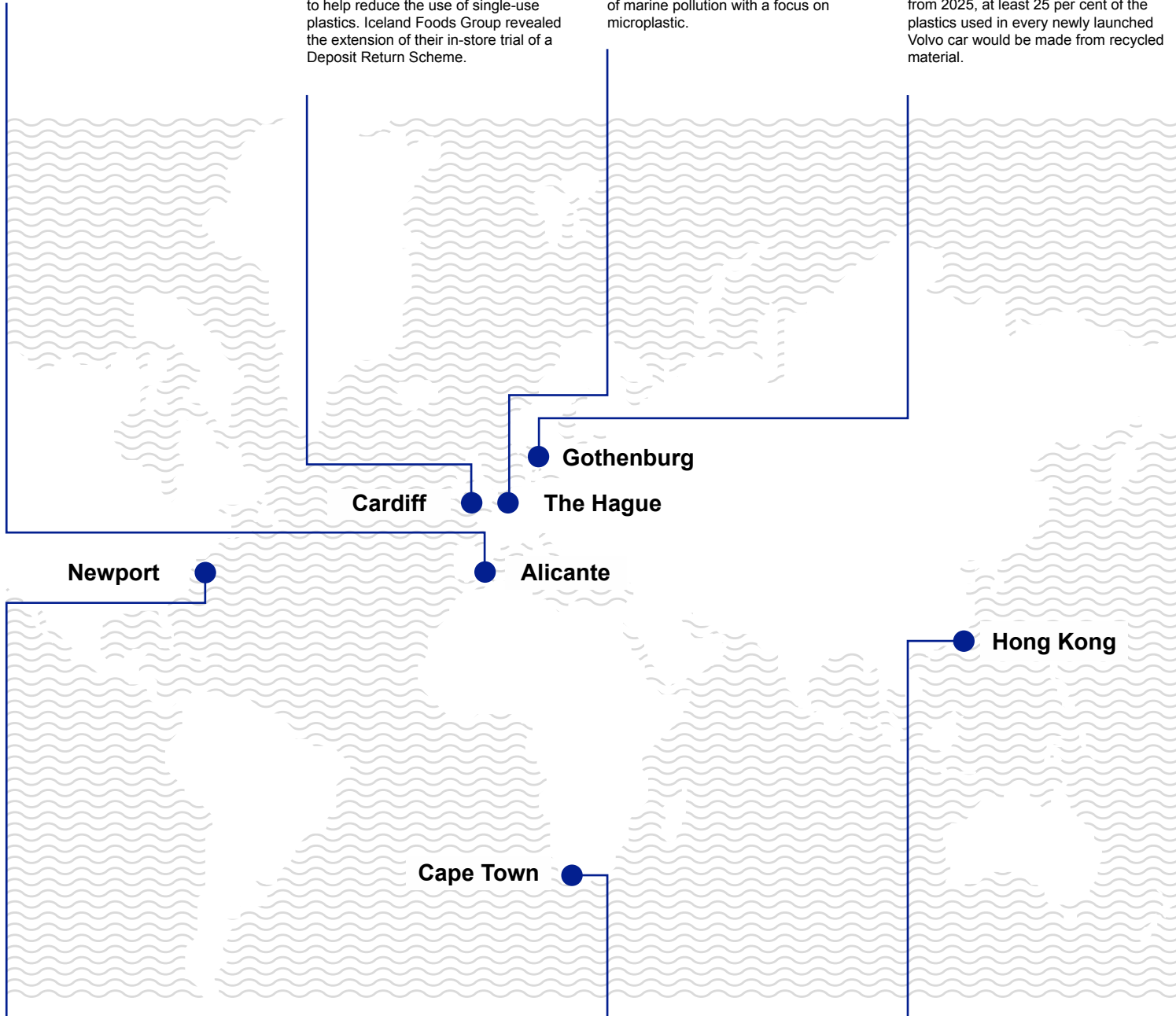
Find out more about the ['Ocean Summits' case study](#).

In **Alicante**, the Spanish Government announced that it was joining the **UN Environment #CleanSeas campaign**. The Mayor of Alicante also announced an education campaign on plastic in all schools in the city.

In **Cardiff**, the Welsh Government signed up to the **#CleanSeas campaign** alongside World Sailing and the International Olympic Committee. The Welsh Government also announced drinking water would be made available along the 870-mile Welsh Coast path to help reduce the use of single-use plastics. Iceland Foods Group revealed the extension of their in-store trial of a Deposit Return Scheme.

In **The Hague**, the city signed up to the **#CleanSeas campaign** and set out a plan to make all plastic products recyclable. World Ocean Council, an ocean industry leadership alliance, revealed the formation of a cross-sectoral business coalition to address land-based sources of marine pollution with a focus on microplastic.

Gothenburg saw the Swedish Government Minister for the Environment, reveal that the Swedish Government has allocated €7.8 million to 15 projects related to Ocean Health. And, to wide recognition, Volvo Cars announced the company's ambition that from 2025, at least 25 per cent of the plastics used in every newly launched Volvo car would be made from recycled material.



During the **Newport** stopover, Rhode Island became the first US state to sign up to the **#CleanSeas campaign**. Volvo Cars revealed it would remove single-use plastics from all its offices, canteens and events across the globe replacing over 20 million single-use plastic items with sustainable alternatives. They also signed up to the **#CleanSeas campaign**.

At the **Cape Town** Ocean Summit, the V&A Waterfront shopping centre, which welcomes 24 million visitors each year, pledged to eliminate single-use plastic bags and bottles. Event organiser World Sport committed to implementing sustainability practices across all its events.

In **Hong Kong**, Daisy Lo, assistant director of environmental protection, Hong Kong Special Administrative Region (HKSAR) government, pledged to explore ways to reduce plastic at source, revealing plans for a \$HK20 million fund for upgrading plastic recycling facilities.

Community outreach

At every Race stopover our partners, race teams and our Education Programme undertook community outreach programmes. We have worked with schools, community groups, girls and boys clubs and university students to help participants understand our inextricable connection with the ocean, the issue of plastic pollution and how they can be part of the solution.

The sustainability Education Programme also collaborated with different organisations and partners of the Race in sustainability education activities such as 11th Hour Racing grantee activations, a live call to the White Shark Cafe with the **Schmidt Ocean Institute**, participating in the **GAC Pindar** kids activity in Lisbon, working with the Dutch Government's **CoCreate** University project in Cape Town, and other organisations associated with the race such as the **Dutch Wavemakers** in Cape Town, Hong Kong, Newport and The Hague.

11th Hour Racing grantees

In every city, Sustainability Founding Principal Partner 11th Hour Racing supported a local environmental organisation with a \$10,000 grant - Vestas 11th Hour Racing joined them at each activation to learn more about and promote the organisation's work.



Photo: Image provided by 11th Hour Racing



Education Programme

Real positive action has been triggered to reduce disposable plastic in schools, communities and homes as a result of our Education Programme.

For the 2017-18 edition we developed the programme so children aged 6 -12 years could discover the excitement of sailing in the Race, learn about the importance of the ocean, understand how plastic pollution is damaging our seas, and how to be part of the solution.

More than 20,000 students participated in workshops in our Race Villages, where we inspired and empowered young people to help turn the tide on plastic.

Our online Education Programme, available in seven languages, is being used by almost 94,000 students in 40 countries worldwide, from Trinidad and Tobago to Timor-Leste!

The programme incorporates a range of different subjects including language, geography, history, STEM, global citizenship and art.

Working with our Youth Academy, we also encouraged young sailors to look after their racetrack and ocean playground through workshops scheduled into their programme.

Check out our online education resources at volvooceanrace.com/education

“The programme is brilliant. The students were blown away by the facts such as the amount of rubbish produced in terms of a truck load. We did activities around single use plastic and many students told us how their parents are now using beeswax instead.”

Sandra Quiggin, Murchison Area School,
New Zealand.



Photo: Jen Edney/Volvo Ocean Race

[Read more.](#)

Race Village activations

Within the Race Village there were many opportunities for visitors to engage with the Ocean Health and plastic pollution issue.

The Globe

The Globe exhibited Clean Seas information boards, and screened a 20 minute film on the Race with three features on Ocean Health and plastic pollution. **The Globe** was also the venue of our onsite school kids' Ocean Health workshops. In Cape Town it also was the venue for a three night TedX Salon focussed on plastic pollution and Ocean Health.



Photo: Pedro Martínez/Volvo Ocean Race

Schools Excursion Programme

Tens of thousands of school children visited the Race Village as part of our schools excursion programme. They learned about the Race and the importance of preventing plastic pollution, through various activities arranged by the local stopover partners. Our stopover partners developed a schools visit programme and included activities specifically for kids. [Read more.](#)



Photo: Jesús Renedo/Volvo Ocean Race

Onsite messaging

Our communications included onsite messaging, social media, traditional media stories and website/app stories and videos. Our Race Villages were full of interactive and display elements with Ocean Health and plastic pollution themes. This included NGOs being present, education workshops and entire 'eco-zones'.

Of course a major part of our communication plan was to attract attention to the issues of marine plastic pollution and Ocean Health by individuals. Our engagement approach was based on 'We're Racing Against Plastic Pollution' and 'What You Can Do' and included signs and messaging throughout the Race Village.



Photo: Jesús Renedo/Volvo Ocean Race

Team Bases Activations

Some of our team bases' public access areas included information about Ocean Health, plastic pollution and environmental issues.

The **Turn the Tide on Plastic** team base had a plastic pollution display, encouraged visitors to make the pledge to Clean Seas and invited them to take a selfie to share to social media with their promises to reduce their plastic footprint.



Photo: Pedro Martínez/Volvo Ocean Race

Vestas 11th Hour Racing's team base had an interactive installation educating visitors about renewable energy solutions, ocean research, innovations to prevent microfiber pollution, and the principles of a circular economy. A video featuring UN Environment Goodwill Ambassador Jack Johnson encouraged people to take the #CleanSeas pledge and their giveaways were sustainably sourced including colouring pencils that can be planted after use.



Photo: Pedro Martínez/Volvo Ocean Race

Dongfeng Race Team partnered with WWF China and included messaging on environmental protection at their team base.



Photo: Pedro Martínez/Volvo Ocean Race

Clean Seas pledge kiosks

Through our Clean Seas programme, thousands of fans and followers have pledged to reduce their reliance on single-use plastic, to advocate for changes in their community and by the brands they support.

Pledge kiosks were set up in the Turn the Tide on Plastic and Vestas 11th Hour Racing team bases.

Our **Green Team** volunteers also wandered the Race Village encouraging people to commit. At every Ocean Summit attendees were also all asked to pledge by skipper Dee Caffari.



Photo: Jesús Renedo/Volvo Ocean Race

Inclusivity, diversity and safety

Making the Race and our events
safe, inclusive and welcoming

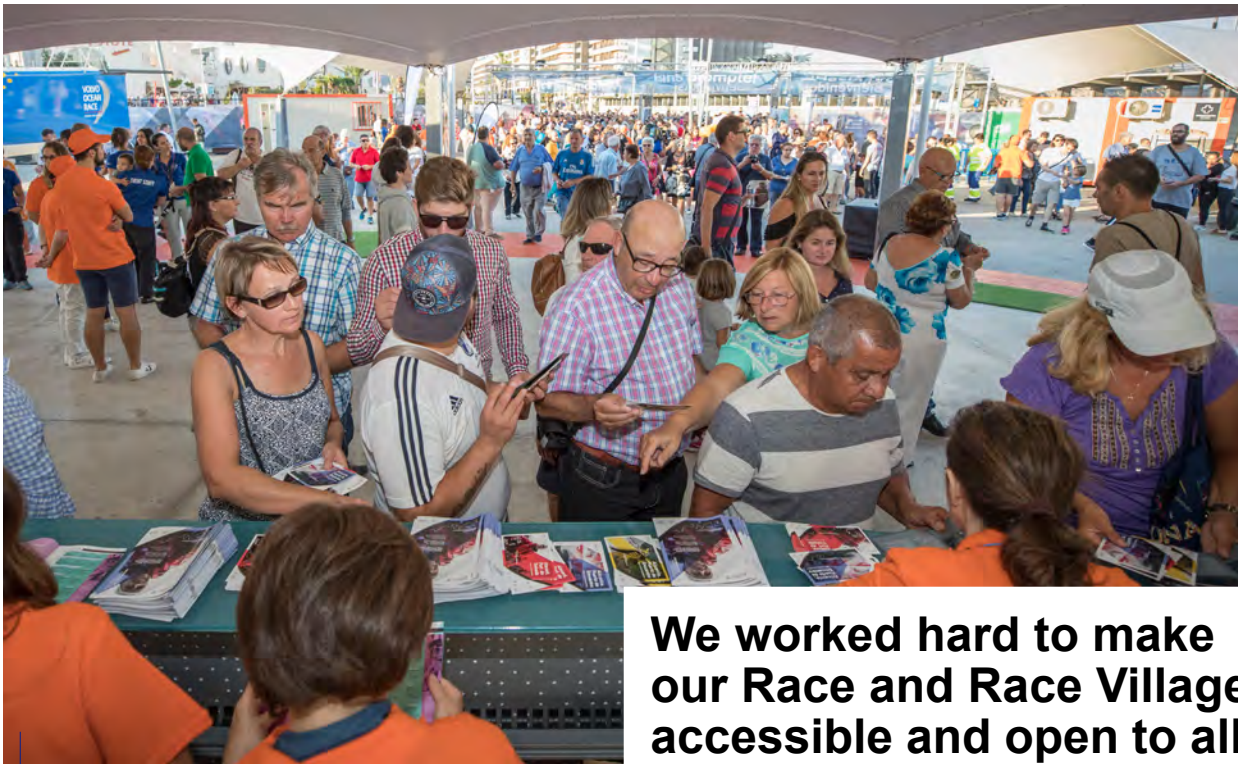


Photo: Ainhoa Sánchez/Volvo Ocean Race

We worked hard to make our Race and Race Villages accessible and open to all. This means safe, fair and inclusive. Within sports development we have put a focus on female and youth talent.

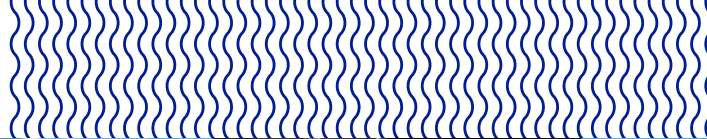


Photo: Martin Keruzoré/Volvo Ocean Race



EO4 Expressions of dissent by type, issue, scale and response.

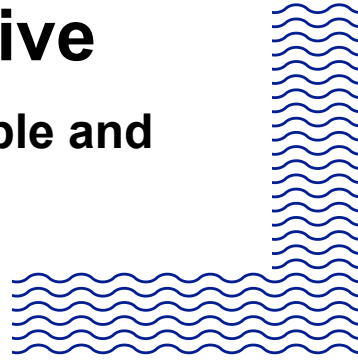
EO5 Type and impacts of initiatives to create a socially inclusive event.

EO6 Type and impacts of initiatives to create an accessible environment.

GRI 416 Assessment of the health and safety impacts of product and service categories.

Our objective

Run an accessible and inclusive event.



Charting our course

In focussing on how we can maximise our impact, we set these objectives to achieve our ambition:

- Ensure the Race is accessible for all who wish to be involved.
- Inspire young people to develop the qualities needed to be part of an around the world sailing team.
- Develop opportunities for a diverse, balanced and inclusive workforce and sailing team participation.
- Ensure a safe, secure and welcoming environment for workforce, teams and visitors.

Why this?

The sport of sailing, our Race's global reach, local activations with our Race Villages and our sustainability message together offer us many opportunities to work on making our Race and our events welcoming and accessible to all.

As a global event it is important that business and employment opportunities are available to local organisations and people.

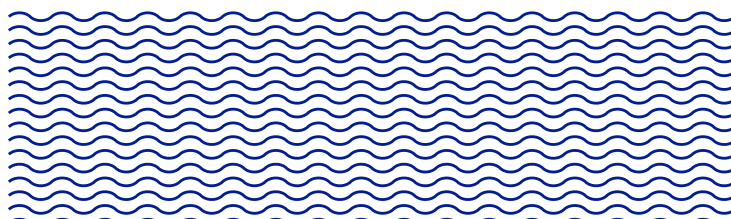
From an event experience perspective, it is important to consider potential attendees and any accessibility issues - physical, cultural or social.

With our Race being the ultimate test of a team, there are opportunities to bring the qualities needed to succeed, into our outreach with young people.

It is the ambition of many young sailors to make it to the top of their sport and to compete as an elite athlete in our high performance sailing event. We must have an eye on accessibility to the sport for all and development of young talent.

As one of the few sports where mixed gender teams can compete at an equal level, it is important our Race offers opportunity for female sailors to compete at the highest level.

Safety on the water and onshore are of highest priority for any sailing and event organiser. With diverse destinations and complicated operations, safety and security is paramount.



Our tactical approach

When looking at accessibility to the Race we considered several approaches:

Physical accessibility planning was required of all delivery partners for our Race Villages. In many cases this is a requirement for events locally, but where that was not the case, we requested it.

The Race Villages are **free to attend**, and in many cases free shuttle buses, bicycle parking and public transport connection information, ensuring few barriers to visitation.

In our opening ceremonies, entertainment and other programming content we ensured to reflect, celebrate and **respect local culture** and heritage.

We required that information on **how to be involved** in Race Villages be available on websites hosted by delivery partners.

We also considered the **accessibility of sailing** itself. Try-sailing was encouraged to be set up as part of Race Village activities.

Young people were also exposed to the Race Village through an extensive schools visit programme.

The whole programme and activations were translated in local languages everywhere.

Local sourcing and employment were prioritised by our delivery partners, and a key success indicator for their involvement is local economic benefit.

We used the Education Programme, Youth Academy and other local sailing activations to instil the **team and personal qualities** needed to be an ocean sailor with young people.

Our race team rules are set to encourage inclusion of **female sailors**. There was also a rule mandating the inclusion of sailors under **30 years of age** into teams.

Safety at sea and onshore are priority element for our Race and Race Village operations. Sailing teams went through extensive safety training and were stewarded with 24-hour race control, and emergency and medial support. Our Race Villages had the required safety and security systems in place, to the requirements and recommendations of each of our host destinations. These were overseen by our global Security Manager.

To focus our efforts in establishing an inclusive, accessible and welcoming environment, we set the following targets:



Our success targets

- 100% of all public spaces within the Race Village to offer accessibility features for those with mobility or other access impairment.
- Accessible and timely information about the event, access and involvement is provided to all stakeholders.
- Priority to local sourcing for non-touring workforce, contractors, suppliers and programme participants (vendors, entertainment, activities).
- Programme the Youth Academy into stopovers and undergo outreach to other youth sailing programmes to incorporate relevant Race content into their curriculum.
- Team building and personal development content is included in the Race's Education Programme.
- A balanced workforce by gender, local status, and minorities (where relevant).
- Inclusion of rules to promote gender balance and opportunities for emerging talent development.
- Zero safety breaches.
- Zero serious incidents.

Review our performance against these targets in the [Appendix](#).

Inclusion and access

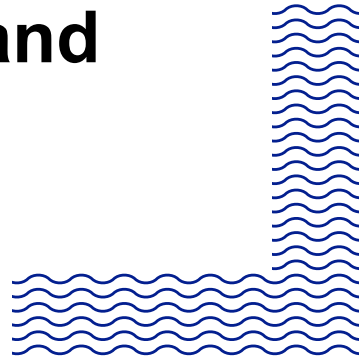


Photo: Pedro Martínez/Volvo Ocean Race

In ensuring the Race and Race Villages were accessible, inclusive and welcoming, there are a huge range of areas in which this concept could be applied. We focused on physical accessibility to the Race Villages, making sailing accessible, gender balance in our race teams, and access to experience through our volunteer and internship programmes.

With twelve diverse destinations and delivery partners, Host City protocols, our own organisation's multiple functional areas, and key

partners own programmes, rigorous attention to accessibility and inclusion is an enormous task. To be successful, consideration for these issues must be integrated into production and programming teams across all stakeholders and functional areas.

Following are some examples of our and our stakeholders efforts. We are looking forward to expanding our programmes and outcomes in this area for the future.

Sailing development

Many Race sailors started sailing in an Optimist, and helping to get kids involved in sailing to grow the next crop of elite ocean racers is on our agenda.

At many of our stopovers, young people had the chance to try sailing.

Through the Optimist on Tour programme from the Dutch Watersport Federation, thousands of Dutch children have become acquainted with sailing as well as canoeing, Stand Up Paddling and other water sports.

During the finish of the Race the Optimist on Tour activated with an amazing temporary sailing lake right on the beach in the Race Village in The Hague.

Watch our sailors Burling vs Tuke in the ultimate Optimist head to head as they get back to their sailing routes. [More.](#)

Adjacent to the Race Village was the European Optimist Championships, which brought young sailors from all over Europe to us.

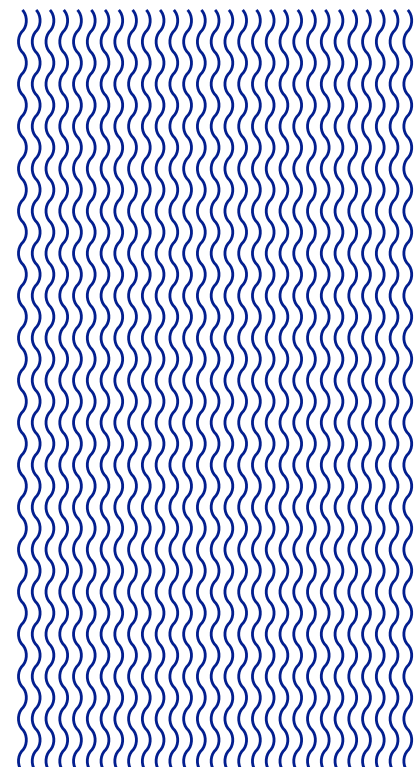
It was terrific to see [Clean Seas Team Europe](#), the Norwegian entrant in the optimist championships, walking the Race Village!



Photo: Clean Seas Team Norway/SailLogic



Photo: Jesús Renedo/Volvo Ocean Race



Youth Academy

The Academy programme started in 2010 to build a legacy in our sport. The main objective was to involve youth and very young people in the sport of sailing with the longer-term goal of some of those young people going on to compete in the race itself in the future.

For the 2017-18 edition, the **Youth Academy** was supported by AkzoNobel with 320 students participating. (60% male, 40% female). The Academy operated at each of the stopovers offering the opportunity to take part in Optimist dinghy racing, on-water training and custom workshops.

In addition, Cape Town, Auckland, Newport RI, Cardiff, Gothenburg and The Hague also ran 'Try Sailing' initiatives enhancing the chance for kids to get out on the water.

It was terrific to see [Clean Seas Team Europe](#), the Norwegian entrant in the optimist championships, walking the Race Village!



Photo: Jesús Renedo/Volvo Ocean Race



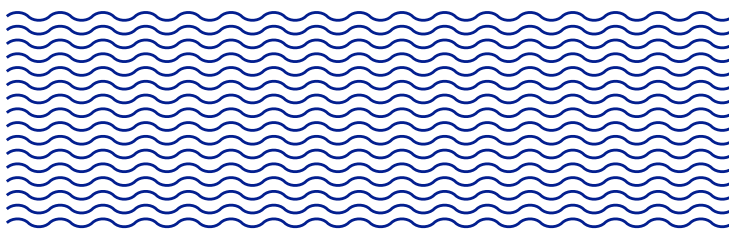
Photo: Ainhoa Sánchez/Volvo Ocean Race

Apprenticeships

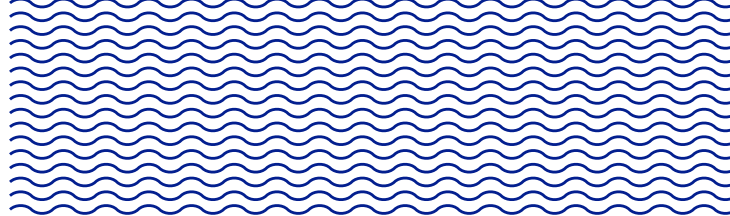
The Academy went one step further this time round. Mustafa Ingham from Bermuda became the first apprentice of the Academy. Supported by the Bermuda Tourism Authority and XL Catlin, Mustafa Ingham, was granted an apprenticeship opportunity to join the Turn The Tide on Plastic team. He was an integral part of the shore team and supported the sailing team during their stopover sailing activities.

Rookies

This edition of the race had rules ensuring sailors under 30 years of age were on each boat. In fact, this race had a large number of younger sailors taking part compared to previous editions and the Turn the Tide on Plastic team raced with a mixed, youth-focussed crew under the tutelage of skipper Dee Caffari.



Cultural Inclusion



In our opening ceremonies we recognised and sought the welcome of traditional custodians of the land, and included appropriate cultural or religious protocols and celebratory elements.

Entertainment included celebration of the local region's cultural identity.

As a global event, we visit diverse destinations, and attract global visitation. Our staff were briefed by our protocol manager on appropriate behaviour, both personally and professionally, for upcoming destinations.

Our Volunteer programme offered an amazing opportunity for our vastly international workforce to work with local people with an invaluable cultural exchange and lasting friendships formed.

Considerations for cultural diversity was also given within our catering service. We of course reflected local food in our hospitality, especially within our corporate guest programme to bring local tastes to catering.

Our awards nights featured local and cultural entertainment and at our final awards night, the buffets celebrated each of the countries we had visited on our tour.



Photo: Jesús Renedo/Volvo Ocean Race

Staff diversity and balance

Our team of circa 200 people, including our head office and travelling staff, had over 20 nationalities and was 35% female and 65% male.

Each department within the organisation - Communications, Boatyard, Business Development, Finance & Legal, HR, Marketing & Branding, Operations, Race Management, Sponsorship, and Sustainability, Control and Boatyard - had a 'Lead' or 'Head' role.

Of these head positions, two were female.

In management or senior roles within the organisation, 46% were female.

The Race has no female board members.



Photo: Pedro Martinez/Volvo Ocean Race

Internships

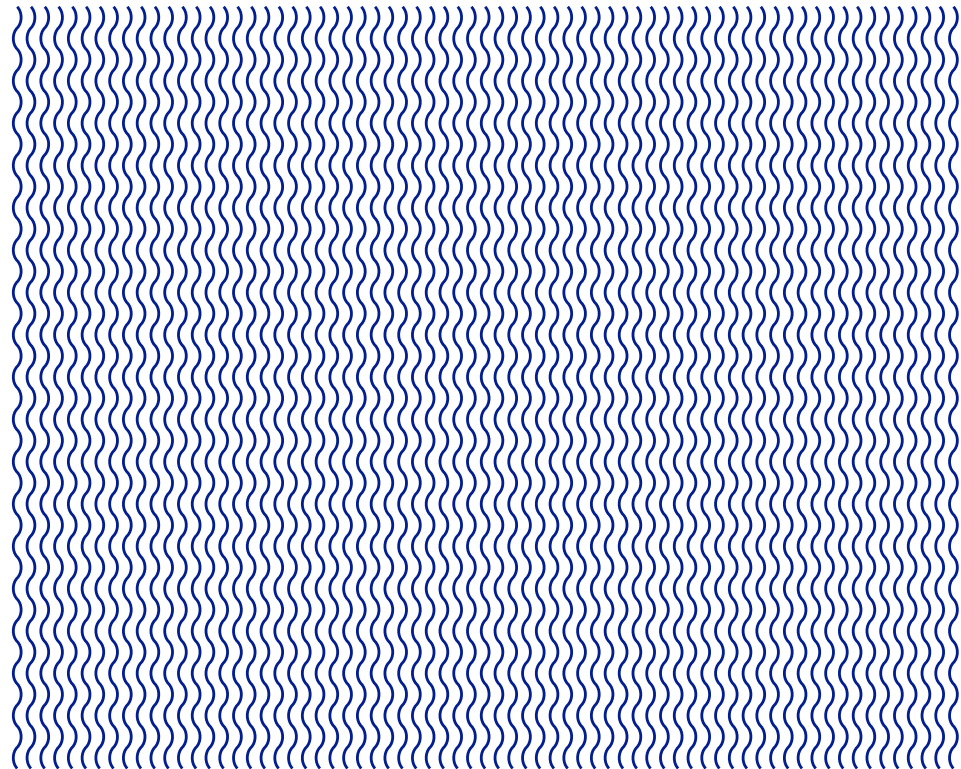
We have an active internship programme at our Alicante headquarters, offering work experience and career development to university students and recent graduates.

In 2017-18 we had 13 interns covering departments including Sustainability, Marketing and Business Development, Communications and Media, Events and Hospitality.



Pictured, Anaïs Boulon, Sustainability Programme Intern

Photo: Jesús Renedo/Volvo Ocean Race



Women in the Race

To encourage opportunities for elite female sailors this edition the Race rules limited all-male teams to just seven crew members, with larger crew configurations including women.

All teams chose to include women in their crew with the seven male, two female crew configuration the most common set up. Women had important roles on several teams, including as skipper, navigator, boat captain, bow, and helm/trimmer.

For the first time a female sailor would win the race, with Carolijn Brouwer (NED) and Marie Riou (FRA) on the victorious Dongfeng Race Team. Justine Mettraux (SUI) also sailed two legs of the 45 000 nautical mile Race, with the team.



Photo: Jesús Renedo/Volvo Ocean Race



Photo: Ainhoa Sánchez/Volvo Ocean Race


Role call of female sailors:

- ◆ Sally Barkow (USA), Team Brunel.
- ◆ Annemieke Bes (NED), Team Sun Hung Kai/Scallywag.
- ◆ Carolijn Brouwer (NED), Dongfeng Race Team.
- ◆ Dee Caffari (GBR), Turn the Tide on Plastic.
- ◆ Sophie Ciszek (AUS), MAPFRE.
- ◆ Francesca Clapcich (ITA), Turn the Tide on Plastic.
- ◆ Bianca Cook (NZL), Turn the Tide on Plastic.
- ◆ Nina Curtis (AUS), Team Brunel.
- ◆ Hannah Diamod (GBR), Vestas 11th Hour Racing.
- ◆ Támara Echevoyen (ESP), MAPFRE.
- ◆ Abby Ehler (GBR), Team Brunel.
- ◆ Martine Grael (BRA), team AkzoNobel.
- ◆ Libby Greenhalgh (GBR), Team Sun Hung Kai/Scallywag.
- ◆ Jena Mai Hansen (DEN), Vestas 11th Hour Racing.
- ◆ Stacey Jackson (AUS), Vestas 11th Hour Racing.
- ◆ Cécile Laguet (FRA), Dongfeng Race Team.
- ◆ Annie Lush (GBR), Team Brunel.
- ◆ Elodie-Jane Mettraux (SUI), Turn the Tide on Plastic.
- ◆ Justine Mettraux (SUI), Dongfeng Race Team.
- ◆ Annalise Murphy (IRL), Turn the Tide on Plastic.
- ◆ Emily Nagel (BER), team AkzoNobel,.
- ◆ Marie Riou (FRA), Dongfeng Race Team.
- ◆ Liz Wardley (AUS), Turn the Tide on Plastic.

The Magenta Project



Women in the Race were celebrated on International Women's Day while in Auckland in association with **The Magenta Project**.

This programme was created after the last Race, through the all-female team SCA. The project work on providing a pathway for professional female athletes to compete at the highest level of sport.

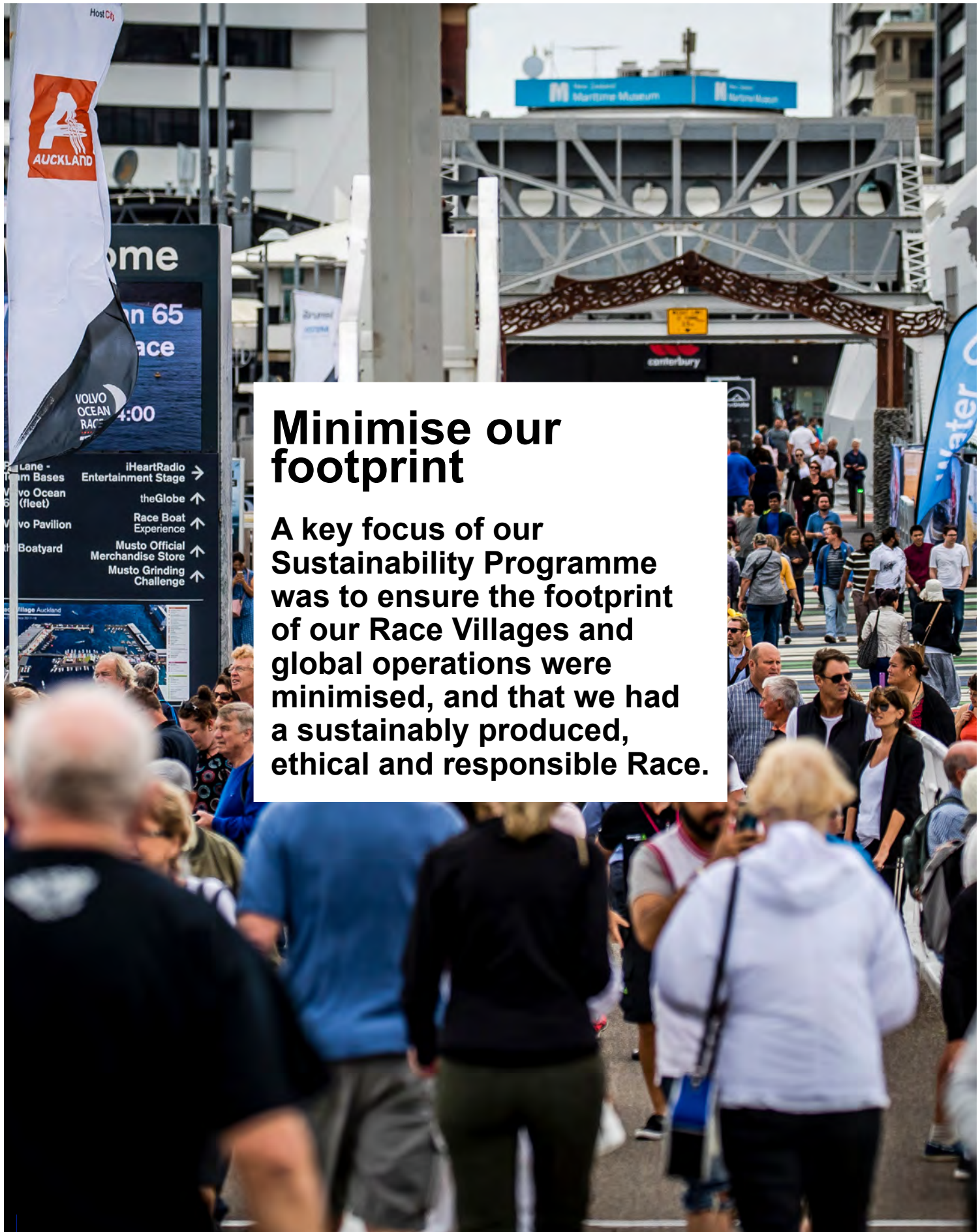
7 x 

7 x  +  or  

7 x  +  or  

5 x  + 5 x 

11 x 



Minimise our footprint

A key focus of our Sustainability Programme was to ensure the footprint of our Race Villages and global operations were minimised, and that we had a sustainably produced, ethical and responsible Race.

How did we minimise our footprint?

Alongside the 'impact' pillar of our Sustainability Programme, which campaigned for Ocean Health and solutions to plastic pollution, we focused on our own sustainable operations. Doing this allowed us to demonstrate our own commitment, and hopefully also provided inspiration to others.

We aspired to embed sustainability management into every aspect of the Race; to minimise the footprint of the Race Village, of the permanent and touring Boatyard, and of Race Teams, sponsor activations.

We worked together to minimise waste and single-use plastic and to recover as many resources as possible.

Energy consumption was monitored to ensure we had the most energy efficient Race Villages possible, and to inform our future Race Village planning.

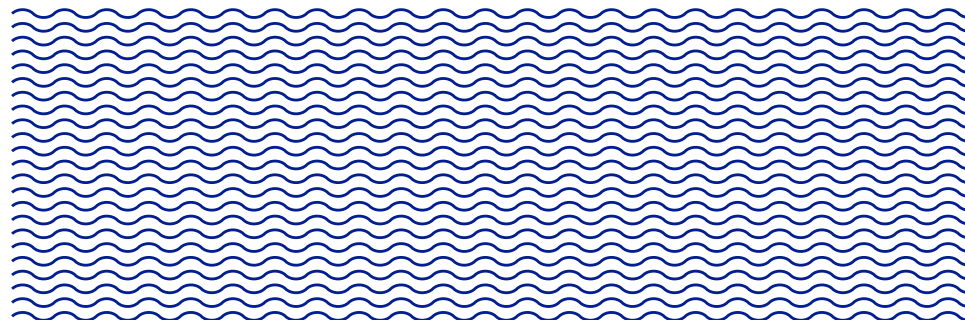
We kept an eye on water consumption, especially important in drought-stricken Cape Town.

With our events and Race taking place on or adjacent to waterways, we made sure we protected them and the local environment from Race Village and Boatyard operations, and on-water activities.

We stayed alert for potential impacts of our purchasing decisions - looking at the backstory of the materials we chose to use and the food we served.

The planning and logistics of the Race and Race Villages were high priority, as was the end of life treatment for the inevitable 'waste' resources.

Impressive examples exist and innovation abounds in reducing the Race's footprint throughout the global the Race family. The following section of our Sustainability Report and the accompanying case studies, links and videos explore and explain our approach, successes and lessons learned on our journey towards minimising our footprint.



Environmental protection

Protecting the environment and restoring Ocean Health



Photo: Mats Lind/Volvo Car Corporation

We carefully assessed potential impacts on the environment of our Boatyard, Race Village operations and of the Race itself.

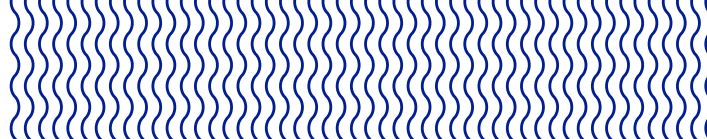
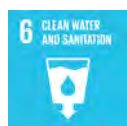


Photo: Jeremie Lecaudey/Volvo Ocean Race



GRI 304 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

GRI 304 Significant impacts of activities, products, and services on biodiversity

GRI 304 Habitats protected or restored.

GRI 306 Significant spills

Our objective

Protect the natural environment from Race and event impacts.



Charting our course

In focussing on how we can ensure to protect the environment from Race and Race Village impacts, we set these objectives:

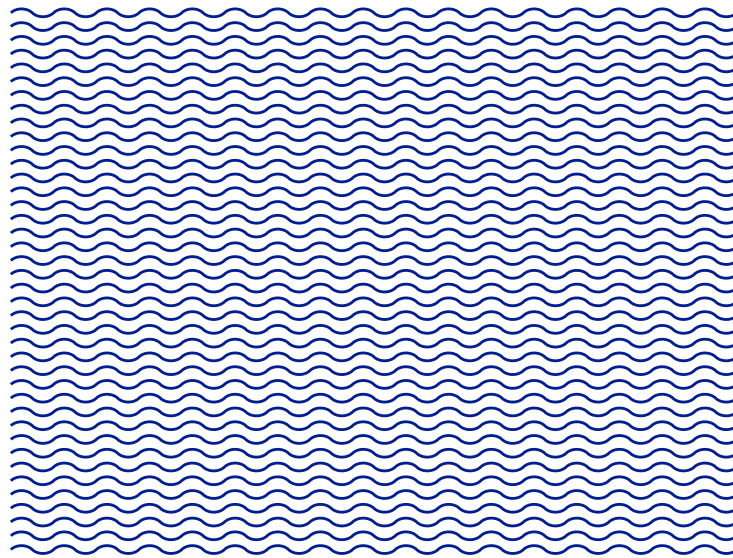
- Adhere to all environmental regulation relevant to our activities.
- Protect ground surfaces, riparian* zone and waterways.
- Protect and prevent disruption to flora and fauna, including marine life.
- Prevent pollution, spills and releases to the environment.

(* The zone between land and water).

Why this?

It is the responsibility of all organisations to protect the natural environment from immediate or indirect impacts of their activities.

With our Race taking place in nature, our Race Villages located adjacent to waterways, and our focus on Ocean Health, it was especially important that we take steps to protect the environment from our activities.



Our tactical approach

We work hard to ensure the physical setting in which our activities take place are protected from negative impacts. This includes during the construction of our boats and Race Village assets, and our on water and shore activities.

Adherence to strict environmental impact management protocols and relevant regulation is included in agreements with stakeholders and suppliers.

They must observe local and relevant regulations on environmental protection and put systems in place to avoid negative occurrences. Response plans must be devised by Race Village, Boatyard and Race Operations so that appropriate procedures can be followed and resources are available to quickly and effectively manage any occurrences.

As a sanctioned race, we must adhere to the rules set down by World Sailing to include Rule 55 Trash Disposal. Bound by local laws concerning effluent discharge, it is ensured all measures are taken to adhere to regulations and plans are in place for any mitigation needed.

We set the following ambitions in protecting the environment from our Race and Race Village impacts:



Our success targets

- Zero spills or releases into the environment.
- No non-compliance recorded with local environmental regulations.

Review our performance against these targets in the [Appendix](#).



Photo: Jen Edney/Volvo Ocean Race

We focused on controlling any impacts during the construction and operation of the Race Village, in the preparation and maintenance of the boats in our Boatyard, of on-water activities inshore, and that the offshore sailing race met World Sailing protocols for environmental and marine life protection.

With an extensive supply chain and contractors, diverse destinations and delivery partners, Host City protocols, our own organisation's multiple functional areas, and key partner's own programmes, rigorous attention to environmental protection must be integrated into production and programming teams across all stakeholders and functional areas. Following are some examples of our area of focus and oversight.

Boatyard operations

The Boatyard was permanently based in Lisbon, Portugal, during the 12 months lead up to the Race start. After this, the Boatyard travelled with the Race, setting up a fully operational maintenance and repair facility at ten of the stopovers.

Within the Boatyard hazardous materials are used, such as fuels, lubricants, adhesives, solvents, paints and coatings. Additionally sanding and grinding are undertaken which can cause airborne particulates.

Strict materials handling protocols are followed, including PPE, exhaust management and hazardous material disposal.

Spills kits, personnel training, and incident response protocols are in place. Protocols were supported through our Race Partner AkzoNobel, who provided many of the products used and have experienced technicians operating within the Boatyard.

Boat maintenance on water

During our stopovers, the race boats, RIBs and other support vessels are berthed at pontoons within the Race Village precinct. Re-fuelling and cleaning, including sullage pump-out are the operations that could pose environmental risk if not managed correctly.

We encouraged water-only washdown, and only endorse use of marine-safe cleaning materials. Pump out procedures and refuelling met all environmental regulations both locally and through accepted best practice for the marine sector.



Photo: Pedro Martínez/Volvo Ocean Race



Photo: Richard Edwards/Volvo Ocean Race

Race Village site

Our Race Villages are set next to the water, often a harbour or beach setting. Spectators keen to view the racing action will invariably wish to find the best vantage point.

We protect delicate areas such as dunes, riparian zones and gardens through careful site planning and fencing. Likewise vehicle and foot traffic is considered and routes planned to minimise trampling or other damage to grounds and surfaces.

During the site preparations often additional infrastructure is needed to have enough space for the required pontoons to berth the race boats. This may require temporary or permanent placement of support poles and other infrastructure.

Additionally certain depth clearance is required which may require dredging. This type of intervention is carefully managed to ensure minimal disruption to the marine environment and that safe and environmentally responsible practices are in place.



Photo: Pedro Martinez/Volvo Ocean Race

Litter prevention

Litter prevention, reduction of waste volumes and maximising recovery to recycling and compost systems is of course a major focus for us.

Litter is not an option and we have resources deployed to ensure discouragement of any littering, and cleaners to intercept any materials which could enter the environment through mismanagement.

During the Race, however, some equipment including sails, a mast, and drones were lost to the ocean. To be commended is Vestas 11th Hour Racing, who calculated their total waste, including a dismasting, and selected Healthy Seas as their final grantee which will empower the removal of approximately 2.1 tonne of ghost fishing gear from the ocean, well above their total waste footprint.

Confetti and Balloons

A challenge with sports events is 'pretty litter' - that means confetti and balloons! Confetti has an immediate littering effect, and so many balloons escape into the natural environment, especially when used outside. We have had to be as strict as we can on these two items. We were unable to convince a complete ban on confetti and in the end agreed to unbleached rice paper confetti which dissolves on contact with water. However we would prefer no confetti at all and will work hard to ensure none is used at future Race Villages. While our confetti is completely

non-harmful to the environment, we know that it is impossible to have the details of the confetti we used as a caption on every photo, and so it is a communications risk we would prefer not to have.

In Alicante, we had a 'concert zone' adjacent to the Race Village, arranged by our stopover partners, but as a separate undertaking from our Race Village. Unfortunately, the production manager of one of the performing bands did not adhere to the request to have no confetti and ejected foil covered plastic confetti (metalized plastic) all over the concert zone, much of which blew into the streets and the harbour. This was disappointing at the beginning of our Race and was a reminder to really press and check with all stakeholders regarding confetti.

Also in Alicante, local fans of our sailing team MAPFRE, arrived with a confetti cannon in hand and let it off all over the team during the departure ceremony. This was unforeseen and unfortunate. While it was paper confetti, it was dyed red and yellow and we had no control on whether it had any toxicity to the environment once it ended up as litter. In **Lisbon** we spotted the same fan base and were able to intercept them and their confetti cannon, preventing it from being ignited!

Balloons were handed out at a few locations and the main reason was that local sponsors had not received or taken on board our no-balloon policy. We were able to quickly rectify this.



Photo: Pedro Martínez/Volvo Ocean Race

Seabin

At suitable stopovers we installed a Seabin, which sits in the water, attached to the pontoon, to collect surface litter. We emptied the contents and sent an audit of items found back to the Seabin Project to add to their international database. Read more about the Seabins upcoming.

View the Seabin in action on their website seabinproject.com.

Read our Auckland Seabin report [here](#).



Photo: Jesús Renedo/Volvo Ocean Race



Photo: Ainhoa Sánchez/Volvo Ocean Race



Photo: Jesús Renedo/Volvo Ocean Race

Wildlife protection

During ocean racing there is the risk that our boats could hit marine mammals. To minimise the potential for strikes team skippers were issued with international protocol along with information specific to each of the race legs highlighting areas with documented high marine mammal distribution.

Where necessary exclusion zones were set out to ensure maximum protection for animals in areas of particular importance.

In the event of a collision teams were required to report the details and location to race control, who would follow due process to submit the record to the IWC (International Whaling Commission) database, and notify the coastguard and nearby vessels if necessary.

As a proactive measure for marine mammal conservation where possible Onboard Reporters recorded observations of animals seen during each leg into a Cetacean Report card. Some observations were filmed and resulted in this spectacular [video](#).

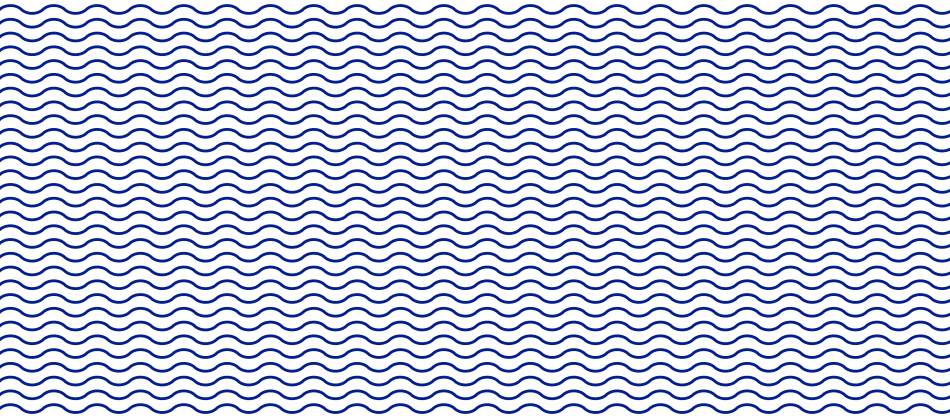


Photo: Jeremie Lecaudey/Volvo Ocean Race

Beach Cleans

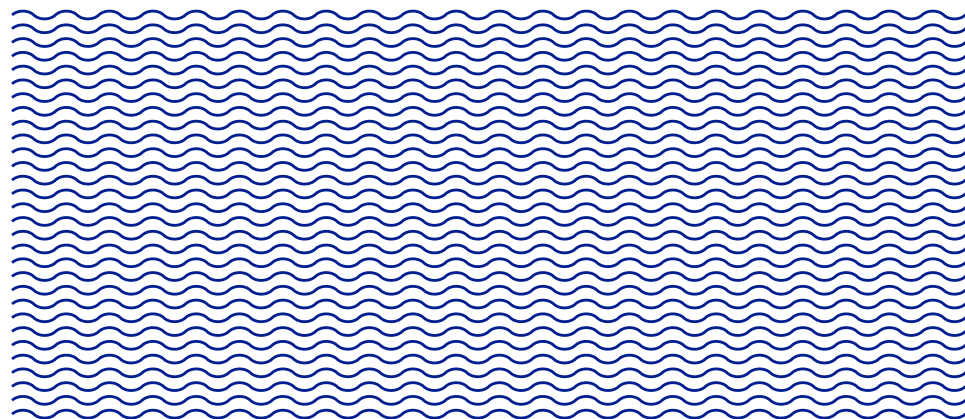
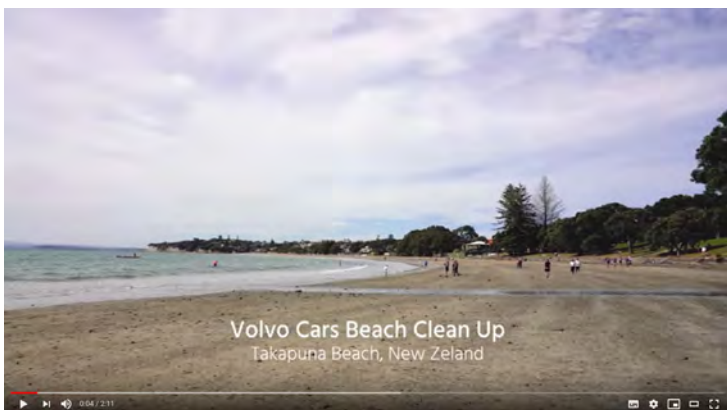
As we raced round the world, we not only witnessed plastic debris in the world's oceans, when we came ashore not a single one of our host ports had beaches clear of plastic.

At each stopover Volvo Cars hosted a beach clean, in association with a local environmental organisation.

Read more in the [case study](#).



Photo: Beau Outteridge/Turn the Tide on Plastic



Energy, water and resource recovery

Responsible resource management



Photo: Jesús Renedo/Volvo Ocean Race

We worked to ensure we were conservative in our resource use and that we responsibly sourced and managed those resources we needed to consume. Our ambition was to access renewable resources, and to support closed loop systems, feeding the circular economy.

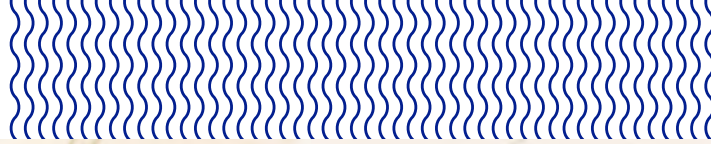


Photo: Pedro Martínez/Volvo Ocean Race



GRI 302 Energy consumption within the organisation.

GRI 302 Energy intensity.

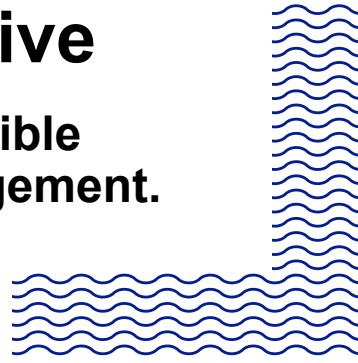
GRI 302 Reduction of energy consumption.

GRI 303 Water withdrawal.

GRI 306 Waste by type and disposal method.

Our objective

Ensure responsible resource management.



Charting our course

In focussing on how we could use resources conservatively and responsibly, we set the following objectives:

- Maximise energy conservation.
- Optimise energy efficiency.
- Maximise renewable energy supply.
- Ensure responsible water use and management.
- Minimise total waste produced.
- Maximise resource recovery.

We also set objectives relating to single-use plastic and materials sourcing and procurement which will be addressed in the following chapter.

Why this?

A foundation principle of sustainable development is to consume the earth's resources only within its carrying capacity and ability for renewal. That means continued growth and development without stressing the earth's natural systems.

For this reason conservative and responsible resource management should be a foundation of any organisation's sustainability plan.

We have identified resource management as including energy, water and waste. Our resource use in terms of materials sourcing and particularly single-use plastic are also key, and addressed in upcoming chapters of the Sustainability Report.

Energy consumption, and the burning of fossil fuels have a direct climate change impact. Minimising energy use, optimising efficiency, sourcing renewable energy supply are all key to ultimately minimising greenhouse gas emissions.

Water scarcity and fair water access are increasingly becoming concerns in many regions of the world. No place was more stark a reminder than our stopover in Cape Town, which is in a state of severe water shortage. Parts of the UK have also been experiencing drought and wildfires have affected Sweden. It is our duty to ensure responsible and conservative water use and for the stopover not to put any strain on a community's precious water supply.

With conservative and responsible resource use comes a circular approach to waste management. 'Waste' materials should be seen as valuable secondary inputs for future materials creation, and their loss to landfill or incineration should be minimised. Before recycling or composting is considered however, looking to reduce the amount of waste produced should be a focus. This aligns with the upcoming single-use plastic avoidance objective.

Our tactical approach

The first tactic was to ensure that our delivery partners were already engaged in sustainable production practices, with an eye on energy conservation, renewable energy supply, water conservation and appropriate resource recovery (waste) systems.

Where this was not evident, we worked with them to adjust systems where it was still operationally and financially possible.

Where time or resources were not available, we provided knowledge, operational and financial support to improve practices already planned.

Our aim was to use global industry best practice and any local event sustainability production protocols as benchmarks.

In some cases the knowledge was not already within the delivery partner team on sustainable best practice for efficient responsible management of energy, water and waste. Where this was the case, our ambition was to help transfer knowledge and new practices into the organisation. This is also aligned with one of our legacy objectives upcoming.

The opportunities to reduce energy impacts, responsibly manage water and to build in resource recovery to event production processes can be found across many and varied areas of our Race Villages.

The responsibility for Race Village operations lay with our Host City delivery partners. The following are examples of some of the initiatives by our delivery partners and our organisation in conservative and responsible resource management.

More details can be viewed by accessing the various case study reports, articles and video content.

We set the following ambitions for our responsible resource management:



Our success targets

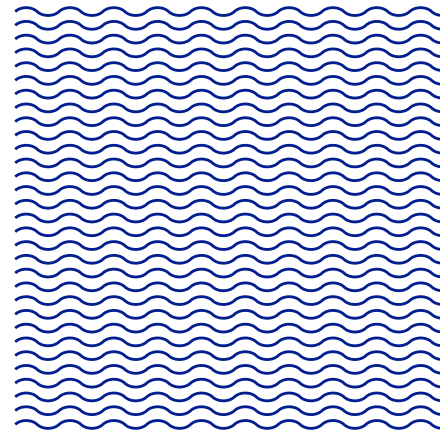
Maximum renewable energy mix possible for mains supply in each Host City.

75% diversion from landfill, or exceed average recycling rates achieved by the Host City or event venue.

Review our performance against these targets in the [Appendix](#).



Photo: Pedro Martínez/Volvo Ocean Race



36.7%

reduction in fuel consumption was achieved at The Hague stopover through implementing a Smart Power Plan, avoiding 53.6 tonne of greenhouse gas emissions

3

Race Villages had renewable energy sources, Lisbon with temporary solar, Newport with 20% biodiesel, and Gothenburg with 100% of power from 100% renewable energy grid-supply

10%

of typical potable water volume used by an event of our type was consumed by our Race Village in Cape Town, achieved through targeted water conservation and non-potable water sourcing

342.6

tonne of residual 'waste' material was generated across all our stopovers and our preparation and pack down phases, including the refit and assembly periods at The Boatyard

45.58%

of resources were collected for recycling or composting

66.62%

is the total collected and avoiding landfill, if we include resources collected for energy recovery

46.3

tonne of timber was collected for either chipping into mulch or biomass for waste to energy

17.7

tonne of plastic was collected for recycling. We estimate that 20% of plastic was lost to landfill due to mishandling

2.69

tonne of film (soft) plastic was recovered through targeted collection for recycling, avoiding landfill

29.8

tonne of compostable resources such as food waste and disposable plates were collected for composting

Energy

Energy was used to run Race Village infrastructure, entertainment, catering and amenities. The power supply came from a combination of mobile (diesel) power generators and mains (grid) supply. Given that the Race Village structures and components were already set, the effort to reduce energy impact was put into smart power planning. Right sizing of generators, correct siting, smart distribution and configuration was key.

In **Alicante** and **Lisbon** we engaged event energy specialists **ZAP Concepts** to monitor and diagnose our Race Village installations and

structure's power demands. This information was then shared with future stopover site managers to assist in efficient power planning and distribution.

ZAP Concepts were engaged for **The Hague** Race Village, where they created a **Smart Power Plan**. Through the centralised generator bank, synchronisation and extensive distribution, they were able to achieve a **36.7% reduction** in fuel consumption, resulting in **53.6 tonne GHG** avoidance.



Photo: Paul Schurink/ZAP Concepts.

Energy conservation

The **Volvo Pavilion** was the signature structure in the Race Village, and it was powered entirely by Volvo Penta generators. In the design of the Volvo Pavilion, effort was put into reducing its energy consumption from HVAC (Heating, Ventilation and Air Conditioning). It is estimated and was planned-in that energy demand was reduced by one third through the use of insulated glass in comparison to the previous edition's pavilion.

Reducing energy demand can be achieved through using energy efficient equipment such as AV and lighting. In all stopovers LED lights were used on stages.



Photo: Ainhoa Sánchez/Volvo Ocean Race

Renewable energy

In **Newport** the stopover sponsor Newport Biodiesel supported our renewable energy ambitions through supplying 20% biodiesel-blend fuel to all generators and onsite plant. An estimated **14.8 tonne of GHGs** were avoided due to this biodiesel usage.

In **Gothenburg**, the site was primarily on mains power supply which was from 100% renewable energy sources.

In **Lisbon** a temporary solar power array was installed. This contributed a small percentage to the power supply however it was a fantastic illustration of what is possible, and located right at the Race Village entrance was a highly visible installation.

Lessons learned: We can do a lot more to reduce our GHG impacts of powering the Race Villages. We can source renewable mains power supply or purchase renewable energy credits, and we can utilise temporary power from renewable sources - biodiesel and solar power, kinetic energy walkways, and pedal power.



Photo: Pedro Martinez/Volvo Ocean Race

Water management

In **Cape Town** the event was severely restricted with regard to the volume of water it was able to draw from the municipal supply. Potable water was only available for use by our three catering outlets. All other water was non-potable water or grey water from the V&A Waterfront facility. We succeeded in limiting our consumption to a volume equal to 10% of water volume typically consumed during an event of this type. In total 100,000 litres of potable water were consumed, and the remainder was grey water, used for washing boats and flushing toilets in the Volvo Pavilion.

Of significance was the conflicting requirement of our Race Village to provide free drinking water to avoid single-use plastic bottles while no potable water could be drawn on within the Race Village for drinking water. **Bluewater**, who at that time were only team **Vestas 11th Hour Racing's** partners, came to the rescue and installed their reverse osmosis water purification systems, allowing healthy, clean, recreated drinking water free of charge to all Race Village visitors, sourced from non-potable water. [Find out more.](#)

As a beautiful legacy, Bluewater have now set up a branch in Cape Town. With their partner I-Drop Water, in September 2018 they launched their mission to provide clean water to everyone across Africa and slash the need for single-use plastic bottles. Merging Swedish ingenuity with African innovation, Bluewater Team South Africa aim to drive the change towards a better, more sustainable way to access and consume water.

The Dutch were always going to be superior water managers and they didn't disappoint in our Race Village in The Hague. The main Race Village site was located on the beach and all water infrastructure needed to be brought in. Because of this, water conservation and resulting waste water volume minimisation was key. Bladders were used to supply water and capture waste water. Water saving devices were used on all facilities.



Photo: Brian Carlin/Team Vestas Wind/Volvo Ocean Race

Cape Town is in severe drought





Water is our most precious resource and we need to change the way we use, re-use and value water.

What Can You Do?

Help reduce both the impact on Cape Town's water reserves and plastic bottle use.

Visit the Consol Glass recycling point on Q6, surrender your plastic bottle and receive a complimentary glass bottle.*

Fill up with recreated and purified drinking water at one of Bluewater's innovative water filtration stations in the Volvo Ocean Race Village.

VOLVO OCEAN RACE

*While stocks last

Source separation of waste

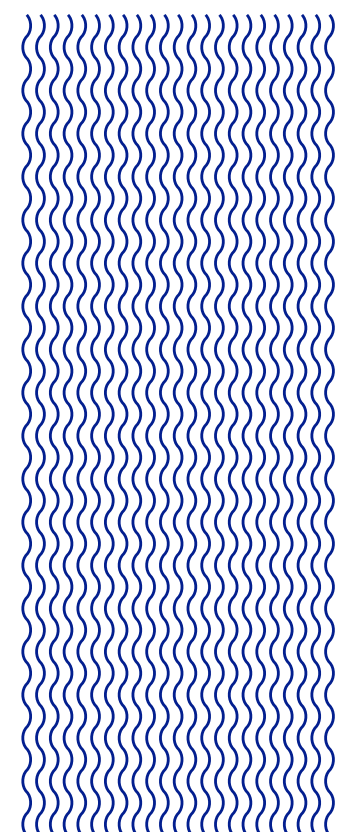
With twelve destinations we had to navigate twelve different models of managing resource recovery. With existing cleaning contracts in venues or arrangements with local government waste services, it was a challenge to always instigate what we believed would be best practice. Our approach was to investigate what the situation was considering all the stakeholders, possibilities and limitations, and where it was necessary and viable, we added additional operations or services to maximise our resource segregation, collection and eventual recycling.

Despite our considerable efforts only 45.58% of waste was recovered and avoided landfill. We estimate that 25% of total waste (which is actually half of all that went to landfill) would actually have been recyclable or compostable, but was lost to landfill because of mishandling by people - production staff, cleaners and attendees. In **Cardiff** and **Auckland** where we had additional back of house pre-sorting and decontamination, we were able to achieve 80% diversion rates.



Photo: Jesús Renedo/Volvo Ocean Race

Read more in the [‘Resource recovery’ case study](#).



Composting

To get away from single-use plastic in public food service we encouraged all traders to supply compostable serviceware. Consequently, compostable waste collection was necessary.

This was successfully implemented 'front of house' for the public, plus 'back of house' for our crew and volunteer catering tents for 'plate scrapings', and by onsite catering kitchens.

Find out more in the ['Compostable resources' case study](#).



Photo: Jesús Renedo/Volvo Ocean Race

A focus on soft plastic

While we were quite successful in avoiding single-use hard plastic, soft plastic remains a difficult item to avoid. Many of our deliveries arrive wrapped or packed in disposable plastic film or bags.

We focussed on collecting soft plastic in many of our stopovers and extracted a total of **2.69 tonne**. It is important to keep soft plastic out of mixed recycling bins as most recycling facilities cannot accept this problematic plastic. [Read more on our efforts to collect and recycle soft plastic.](#)

More needs to be done to influence the supply chain or make alternative purchasing and operational choices to avoid soft plastic. Where we collected film plastic separately, we arranged direct collection for this material to ensure it would be accepted for recycling.

Read more in the [case study](#).



Photo: Damian Foxall

Food salvage

As the photo shows, the teams had to keep a close eye on their food stores when racing, but at the Race Villages sometimes we had a some surplus. To avoid this food being wasted, at the end of each stopover we arranged a food donation to a relevant charity, or food rescue service, for any high quality leftover food from our catering kitchens in the Volvo Pavilion and Sailors Terrace. **A total of 3 tonne was donated.**

Find out more in the ['Resource recovery' case study](#).

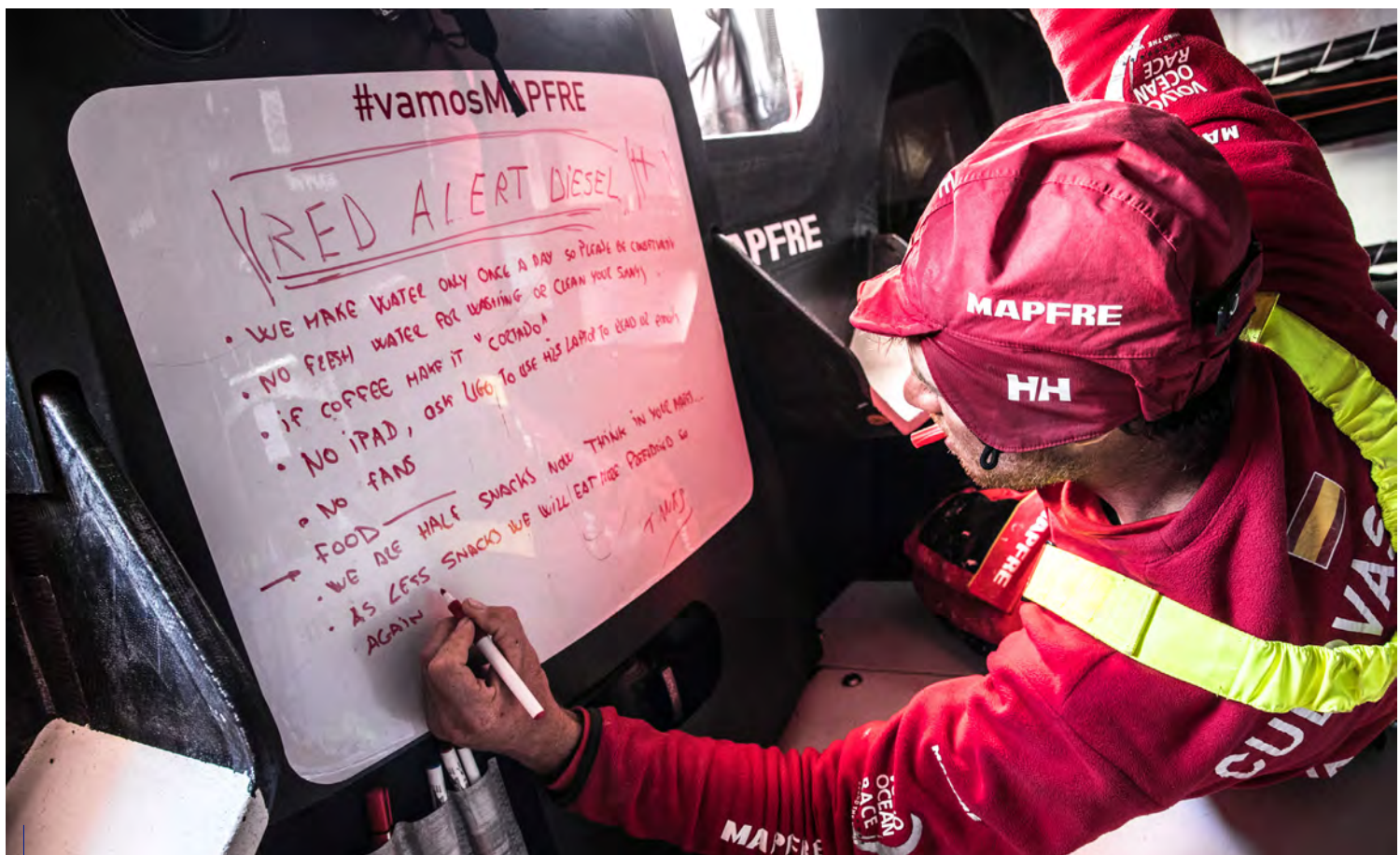


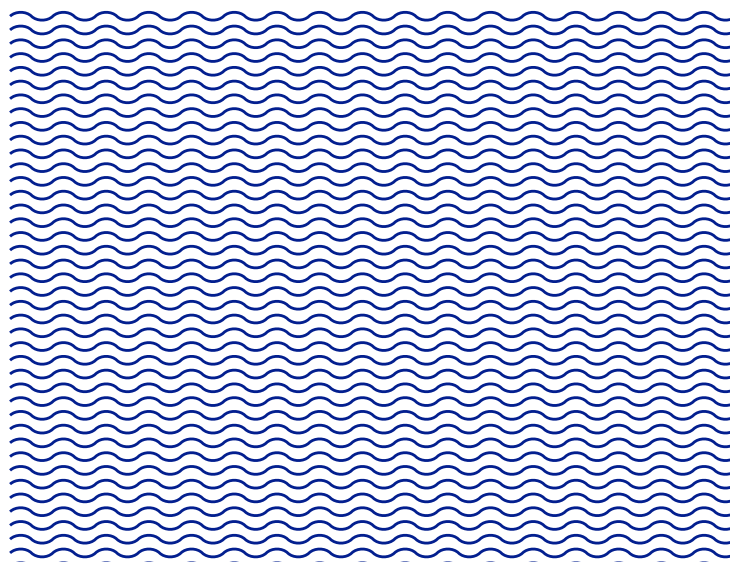
Photo: Ugo Fonollá/Volvo Ocean Race

Uniform recycling

Our combined staff numbers, both for the Race organisation and Volvo Group/Cars, meant a lot of uniforms! We set up a uniform salvage station at The Hague and back at the Alicante HQ, for uniforms to be surrendered. Those which had sponsor branding (t-shirts, shirts) were sent for recycling, and trousers were donated to charity. No jackets were returned, being kept as souvenirs by staff.



Photo: Richard Edwards/Volvo Ocean Race



Branding materials

A huge amount of branding was created for our Race Villages, by ourselves, Host Cities, and also our stakeholders for their activations. Branding of the Race Village was 50% locally produced (with the Host City's partners and logos) and 50% was produced for the whole of the Race and toured with the rest of the infrastructure.

Use of PVC was strongly discouraged and the majority of our stopover partners were able to produce their flags, banners and other branding without PVC. A large amount of stickering, to cover flat boards and marquees was used however, and this was unfortunately PVC in most cases.

We re-used our branding six times, with two sets touring each of our routes. At the end of our routes (Gothenburg and The Hague) the material was collected. Unfortunately in Gothenburg there is no textile recycling, and despite a lot of logistical effort, there was a last minute failure in getting this material into our freight to The Hague for recycling. All material in Gothenburg was disposed of therefore through waste to energy incineration.

Find out more in the ['Resource recovery' case study](#).

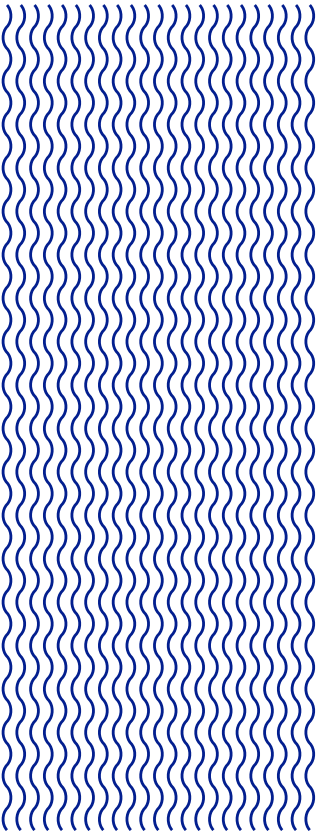


Photo: Pedro Martínez/Volvo Ocean Race



Photo: Ainhoa Sánchez/Volvo Ocean Race

At many stopovers, the local branding was donated for repurposing into other items. After the stopover of The Hague a 'pick up' day was arranged to donate flags and banners to fans. All other material was sent to recycling or energy recovery.

In The Hague, the flags and other branding items were sought after by fans and designers wanting unique materials to produce secondary items from.

Reducing our single-use plastic footprint

Responsible resource management



Photo: Pedro Martínez/Volvo Ocean Race

We strived to drastically reduce our single-use plastic in association with the Race. We focussed on avoiding disposable plastic bottled water by providing water refill points and in finding alternatives to single-use plastic in food and beverage service.



Photo: Pedro Martinez/Volvo Ocean Race



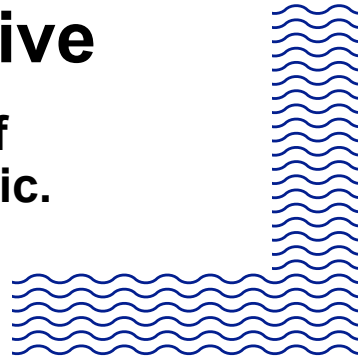
EO9 Type and sustainability performance of sourcing initiatives.

GRI 306 Waste by type and disposal method.

GRI 301 Reclaimed products and their packaging materials.

Our objective

Avoid the use of single-use plastic.



Charting our course

To focus our efforts on single-use plastic reduction, we established the following objectives:

- Avoid single-use plastic beverage bottles, serveware and catering consumables.
- Reduce volume of production plastic used and maximise recovery.
- Influence adoption of policies and practices relating to disposable plastics use and plastic pollution control.

Why this?

To align with our key message of Ocean Health, with a focus on plastic pollution, our most important, visibly impactful and challenging goal was to avoid single-use plastic in our Race Villages.

It was important to take direct action in our own operations to show that we firmly stood by our call to action. Without showing credible action ourselves, we could not authentically ask others to act.

Whilst any plastic that was created by our Race Villages would have been collected for recycling in most cases, the elimination of avoidable single-use plastic should be the first option.

Our tactical approach

We worked with our staff and stakeholders to identify and create ways to avoid single-use plastic in our Race Villages – through offices, catering, bars, merchandise, décor, gifts and supplies. This was done through holding a Plastic Ban Workshop with staff, creating a Plastic Reduction Plan, and through one-on-one meetings with functional areas, Host City delivery partners and race team representatives.

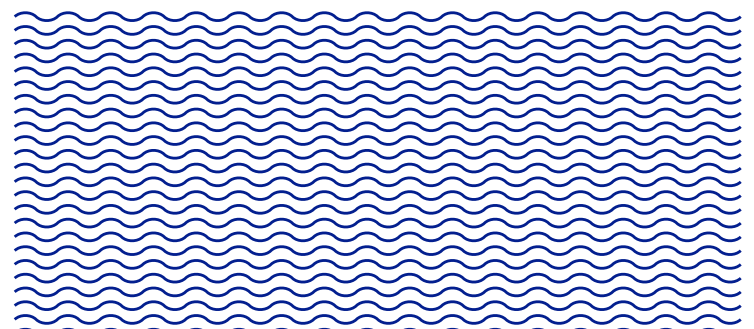
Single-use plastic bottles for water and other beverages were our first and obvious target.

A focus on beverage cups and food serveware was the next tactical approach.

Avoidable ‘mini-plastics’ were identified to eliminate, such as straws, stirrers and sachets. ‘Pretty litter’ also got some attention, with bans on confetti, glitter and balloons.

Plastic packaging, especially bags and soft plastics were a special target.

Hidden plastics were also considered, such as plastic linings on disposable cardboard coffee cups.



We set the following ambitions for our responsible resource management:



Our success targets



Reducing single-use plastic consumption related to food and beverage service in Race Villages by at least 80% from the previous edition of the Race.

- Complete removal of single-use plastic cups.
- Complete removal of single-use plastic water bottles.
- Complete removal of single-use plastic other beverage bottles.
- Complete removal of disposable plastic food containers and lids
- Complete removal of plastic single-serve sachets (condiments).
- Complete removal of disposable plastic cutlery.
- Reduce the use of cling film in catering by 50% through increasing use of reusable containers.



100% recovery of plastics able to be recycled in each Host City.



100% ongoing adoption of film plastic recycling for events by all Host Cities and their waste companies servicing events, where film plastic recycling is available locally.



100% ongoing adoption of use of bungees or other reusable fixings in place of disposable nylon cable/zip ties by delivery partners and Host Cities.



Uptake by Host Cities, venues and major suppliers of at least one new disposable plastic reduction or plastic pollution prevention action or policy.

Review our performance against these targets in the [Appendix](#).

Our results in numbers

Avoided

388,207

single-use plastic water bottles avoided through the placement of water refill points throughout our Race Villages

1,000,000

items of single-use plastic avoided from food and beverage service

180,000

disposable plastic cable ties avoided through investing in 30,000 reusable bungees to attach our Race Village branding

Collected

2,690

kilograms of film (soft) plastic recovered through targeted collection for recycling, thereby avoiding landfill

21,265

kilograms is our total plastic footprint, with an estimated 80% successfully collected for recycling

Lost

3,500

kilograms of plastic estimated to be lost to landfill

Turn the Tide on Plastic at Sporting Events

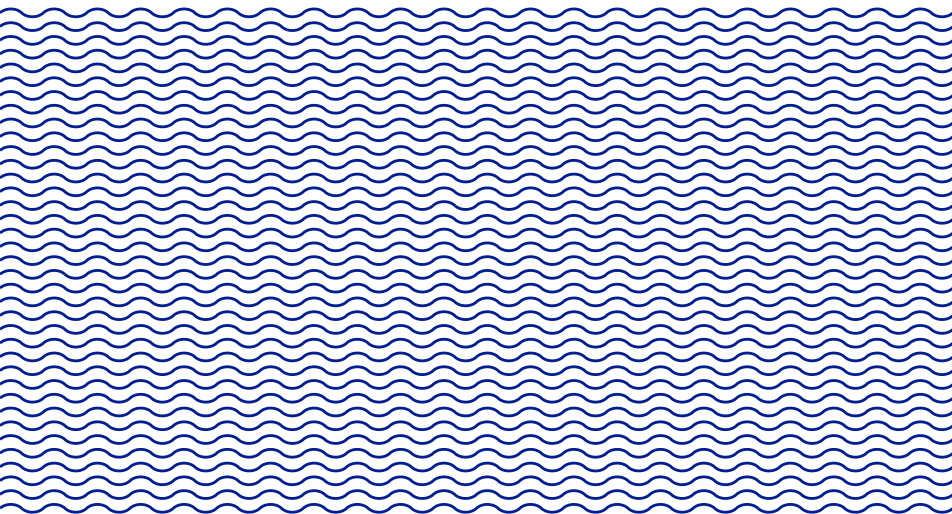
User Guide.



From local playing fields to the world stage, athletes, teams, clubs, events organisers, federations, stadia, spectators and fans are joining forces to turn the tide on plastic. Sporting events can show true leadership by eliminating single-use plastic from their sites and advocating throughout their supply chain and fan base for everyone to play their part in making #CleanSeas a reality.

This guide has been produced to share our knowledge and learnings on how to reduce single-use plastic at sporting events. We hope it inspires you to take action to turn the tide on plastic at your event too.

[Download the guide.](#)



Volvo Ocean Race
Turn the tide on plastic at sporting events

User guide | June 2018

With the cooperation of

UN environment

11TH HOUR RACING

VOLVO OCEAN RACE
 ROUND THE WORLD



Photo: Jesús Renedo/Volvo Ocean Race

There were many opportunities to reduce single-use plastics within our Race Village, and a huge variety of achievements and efforts put in by people passionate about reducing our collective plastic footprint.

To reduce single-use plastic, focus was put on bottled water and other beverages, food and beverage serviceware, and mini plastics such as straws, stirrers and sachets.

However the mission was taken up en-masse across our Race family and built momentum not only in the production practices of all, but in people's daily lives and with their families and kids' schools.

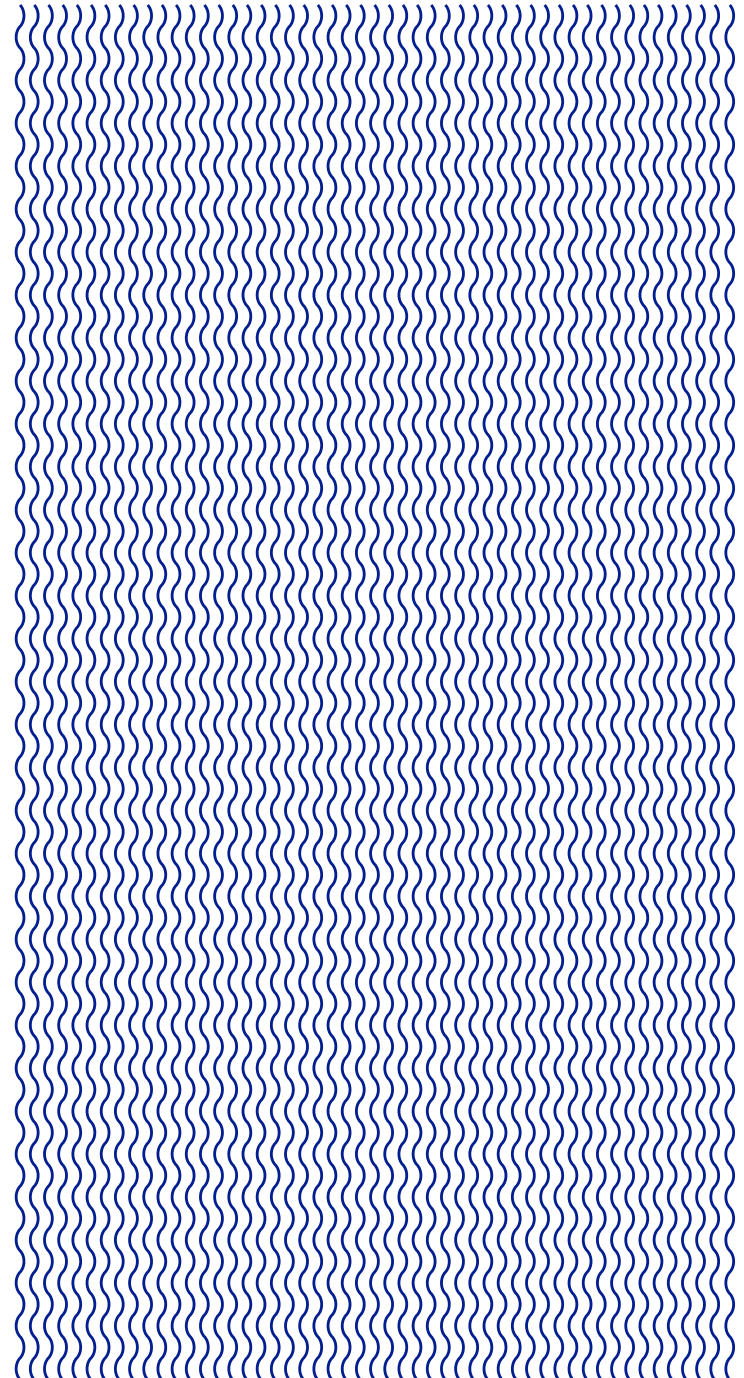
The following pages are some of our single-use avoidance achievements.

Total avoided plastic items

While we did not receive reports on the number of drinks or meals sold at most stopovers from the traders, we feel we are still able to calculate an estimate of the number of plastic items avoided due to replacement with reusable cups or non-plastic packaging alternatives.

Assuming that most drinks would previously have been in plastic bottles, and an assumption of a modest percentage of people attending our Race Villages purchasing or being served one drink, added to actual figures provided by some stopovers, we estimate **1,000,000 items of single-use plastic were avoided**. (That doesn't include cutlery!).

Read more in our case study and lessons learned in our ['Plastic leaks' report](#).



Single-use plastic water bottles

A total of **388,207 plastic bottles** were avoided through the placement of water refill points in the Race Villages.

This figure was calculated based on the total volume of water that flowed through our water refill stations provided by **Bluewater**, our Official water partner, along with other points onsite.

Bluewater's units use reverse osmosis and can take the dirtiest and undrinkable water and turn it into pure clean and healthy mineralised drinking water. It's chilled and there is even a sparkling water option. In Cape Town we could not draw on any potable water or municipal water for our public drinking stations. In most stopover locations, non-potable water was sourced to provide clean drinking water.

[Read more about our partnership.](#)



Photo: Ainhoa Sánchez/Volvo Ocean Race

Race Village attendees, teams, volunteers, and our event staff were all encouraged to bring their reusable water bottle with them and to use our water refill points. In **Alicante** the stopover partner provided a reusable bottle to every Race Village visitor on the opening day. In **Cape Town**, local sponsor **Consol Glass** offered a plastic bottle amnesty where people could surrender their single-use plastic bottle and receive a free gift bottle to refill at our Bluewater stations.



Photo: Pedro Martínez/Volvo Ocean Race

A Clean Seas branded bottle was provided to all travelling staff for the Race and all volunteers across the twelve stopovers. Teams and sponsors also provided bottles to their guests. **The Hague** stopover partnered with Doppler who also provided bottles to volunteers and event staff.

Public catering serviceware

For public catering we encouraged compostable or washable serviceware. While we haven't been successful with every vendor, our estimate is 85% of potential plastic serviceware items have been transitioned off plastic to alternative materials.

We would have had a figure nearer 95% of plastic replaced by alternatives in public catering serviceware for the whole race if we did not have styrofoam trays in Itajaí.

Read more in the ['Plastic leaks' case study](#).



Photo: Jesús Renedo/Volvo Ocean Race

There is no composting in Itajaí so even if we had gone to compostable these would have ended up in landfill. Food-soiled plastic, styrofoam or other, is also not recyclable. Unless composting is available in the future, the only option for the future in Itajaí is food which has very limited packaging (on serviettes, skewers or paper plates), of course to go to a washables system.



Photo: Pedro Martínez/Volvo Ocean Race

In Hong Kong a washables system was implemented for the public catering area with an estimated 45,000 single-use catering items avoided.

Read more about our system in ['Re-use Hub Hong Kong' case study](#).

Crew and guest catering

The standing request for all crew, volunteer and guest catering (corporate hospitality) was for it to be served on reusable food and beverage serviceware. We were successful in most locations in achieving this. Gothenburg stopover was the only one that did not have washable containers for crew and volunteer catering.

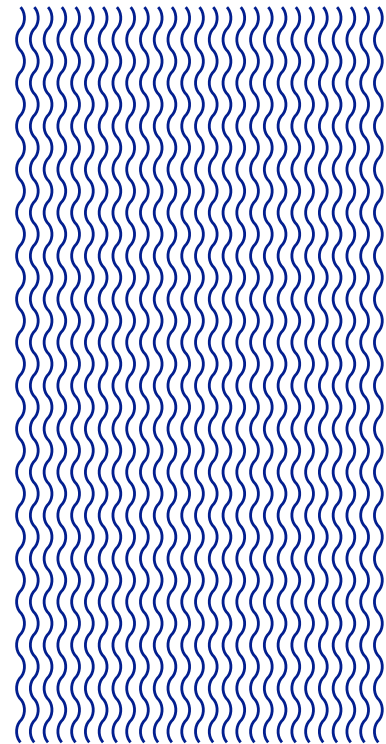
All major corporate hospitality, by the Race, the host cities, partners, sponsors and teams was with reusable crockery and glassware. Some small infractions occurred but on the whole it was extremely well executed.



Photo: Jesús Renedo/Volvo Ocean Race



Photo: Pedro Martínez/Volvo Ocean Race



Reusable cup system

There was the potential for hundreds of thousands, possibly millions, of plastic cups to be created during our nine month event across twelve destinations.

We put effort into encouraging our stopover partners to introduce a reusable cup system for public bars. Seven of our stopovers put this system in place: **Alicante, Cape Town, Hong Kong, Auckland, Itajaí, Gothenburg** and **Cardiff** all implemented a reusable system for bars.

Read more in the '[Reusable cup system](#)' case study.



Photo: Pedro Martinez/Volvo Ocean Race

Some of the other stopovers had PLA (cornstarch) cups, which introduce a number of challenges. Some stopovers did not have large public bars, rather they had individual vendors some of which had reusables and some had plastic.

Other bottled beverages

We also challenged our hospitality vendors and public caterers to avoid plastic bottles in all beverage service. This meant going to 'post-mix' drinks in reusable or cardboard cups, or pre-packed drinks in aluminium cans or glass bottles. Likewise, we did not permit any food to be served on disposable plastic plates or containers.

Coffee cups

Coffee cups seem to be an ongoing problem in many locations however and something we must address in future Race Villages. Crew and volunteer catering often had disposable cups, also provided in production offices and the media centre.

The event staff were reluctant to be convinced to either have their own reusable coffee cup when getting barista coffee from local coffee shops or onsite coffee stalls. We tried so many tactics including giving coffee cups away and activating a campaign to highlight the impacts of coffee cup disposal. It seems there is a lot more work to do to change the coffee drinking habits and reduce disposable cup use.



Photo: Pedro Martinez/Volvo Ocean Race

Plastic bag wrapping

In December 2016 Musto, the Race's official supplier of sailing apparel and footwear, were encouraged by Vestas 11th Hour Racing and us to reduce their environmental impact by finding a more sustainable alternative to their plastic packaging.

They halved their standard 60 micron film plastic garment bag to a mere 30 micron. They went one step further by putting an additional fold in the garments - halving the size of the bag!

Their efforts resulted in a 70% reduction in plastic packaging related to our apparel range, meaning four tonne of plastic packaging was avoided through our and Vestas 11th Hour Racing's merchandise ranges. They continue to reduce their packaging, amounting to an 11 tonne reduction annually for the company.

[Read more.](#)

Reusable bungees

Rather than single-use cable ties, we invested in 30,000 reusable bungees to attach our banners and flags. This avoided the use of an estimated 180,000 single-use cable ties.

Most branding installation contractors and all delivery partners have agreed that reusable bungees are the way to go and all look forward to integrating this measure into their future event work.

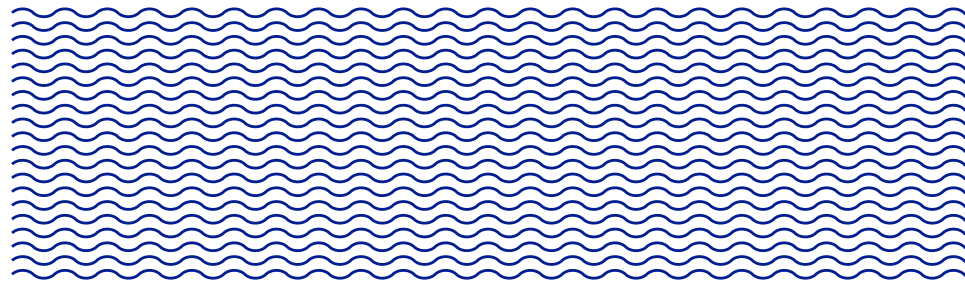


Photo: James Blake/Volvo Ocean Race

Plastic leaks

Despite our huge effort in engaging all those who can help us to avoid single-use plastic, we still saw some disposable plastic making its way onto our Race Villages.

Where we could intervene immediately we did so (such as requesting straws be removed). Where the request had not been communicated through effectively to the stakeholder, we sadly had to tolerate some disposable plastic items. Some of the plastic leakage we saw included:

Influencing host cities

Our focus on reducing single-use plastic at our Race Villages had a positive effect on almost all of our Host Cities.

[Read the 'Supporting success' case study for more.](#)

- ◆ **Plastic cutlery, food containers, stirrers, ice cream spoons and straws used by some vendors.**
- ◆ **Plastic food containers provided by offsite caterers for our on-water staff lunches.**
- ◆ **Plastic bottled water sold by food vendors, provided to hospitality guests or used by event staff.**
- ◆ **Disposable plastic-lined coffee cups used by some vendors and brought onsite by event staff.**
- ◆ **Disposable plastic items (frisbees, bags, yoyos, rulers) given away.**

[See the 'Plastic leaks' case study for more examples.](#)



Photo: Ainhoa Sánchez/Volvo Ocean Race

Responsible, sustainable and conservative sourcing

Responsible resource management

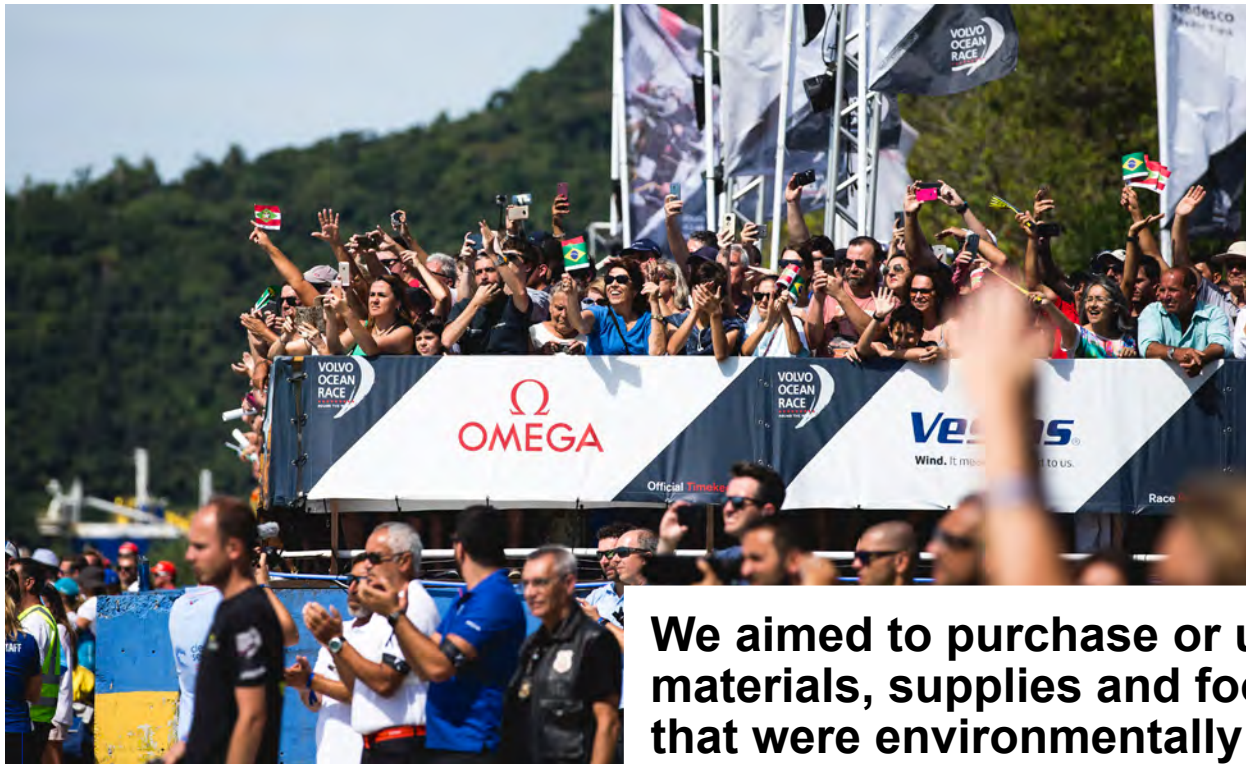


Photo: Pedro Martínez/Volvo Ocean Race

We aimed to purchase or use materials, supplies and food that were environmentally sound and ethically sourced, with a focus on local procurement.



Photo: Jesús Renedo/Volvo Ocean Race



EO8 Percentage of and access to food and beverage that meets the organiser's policies, or local, national or international standards.

EO9 Type and sustainability performance of sourcing initiatives.

GRI 204 Proportion of spending on local suppliers.

GRI 414 New suppliers that were screened using social criteria.

Our objective

Source responsibly with concern for resource conservation.



Charting our course

To focus our sourcing efforts by our organisation and those purchasing on our behalf, we established the following objectives:

- Source environmentally responsible materials and food.
- Reduce total volume of materials purchased.
- Source ethically and with social responsibility.
- Support local suppliers.
- Support sustainable accommodation.
- Support sustainable fisheries.
- Promote healthy diets.

Why this?

A huge amount of physical resources are needed to run most events and this is also the case for our Race and Race Villages. Materials sourcing decisions should have consideration for reduced consumption, and for materials made from sustainable and renewable resources that are durable or can be continually cycled, feeding a circular economy.

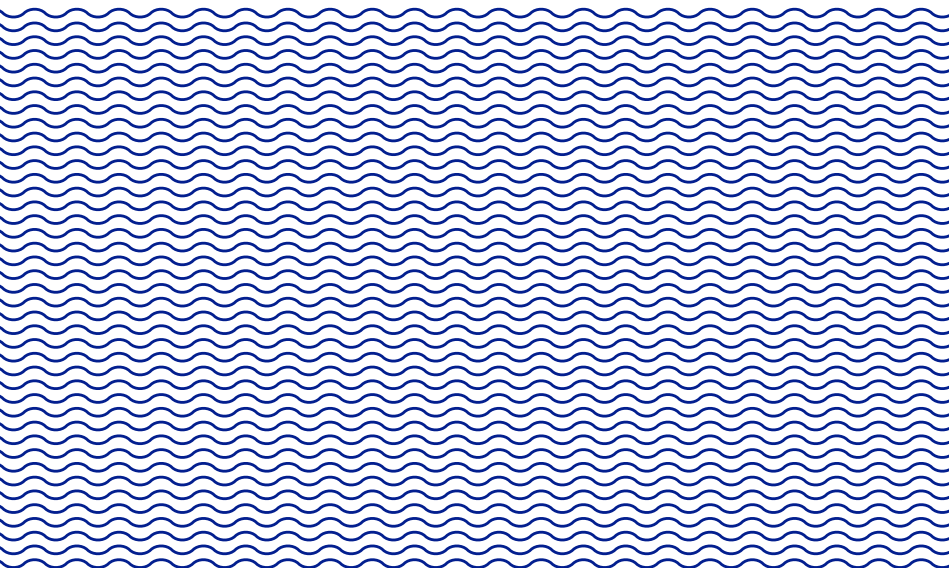
The foundation principles of sustainable procurement include sourcing which is fair, responsible, ethical, transparent, renewable and ultimately within the earth's carrying capacity.

Using recyclable materials, re-using, buying low-carbon products, choosing organic, buying fairtrade, sourcing locally and ensuring workers' welfare are all ambitions of those seeking to source sustainably.

Conversely, irresponsible, environmentally unsustainable and unfair or unethical sourcing can have the potential to contribute to resource depletion, environmental degradation, negative community impacts, unfair work practices and unfair extraction or distribution of the earth's resources, amongst many other detrimental outcomes.

Purchasing choices could unwittingly make the buyer complicit in forced or child labour, unsafe working conditions and corrupt or illegal resource extraction.

The purchases made, materials used and food served throughout the Race are important examples of our commitment to sustainability, and our commitment to environmentally responsible and ethical sourcing.



Our tactical approach

Our ambition was to source as responsibly as possible, given the timing and resources available to scrutinise purchasing choices.

This edition of the Race we primarily focussed on reducing single-use plastic, however we also created a **Sustainable Sourcing Code** to inform purchasing and to set the baseline for future improvements.

Whilst nothing was contracted into agreements with stakeholders, we engaged and encouraged our delivery partners, sponsors, teams and other participants to have a focus on ensuring an ethical and environmentally responsible supply chain.

We created sourcing guidance framed around these key questions:

- ◆ **Do we really need it?**
- ◆ **Where does it come from?**
- ◆ **What is it made from?**
- ◆ **How is it manufactured?**
- ◆ **Who made it?**
- ◆ **How is it packaged?**
- ◆ **What is the end of life plan?**

Key areas of sourcing and materials include branding, merchandise, uniforms, ICT, infrastructure, amenities, stationery, supplies, catering.

The following targets include realistic targets for this edition of the Race and blue sky ambitions for future sourcing. Where we could influence or achieve these ambitions we of course strove for them.

- ◆ **Our success targets**
- ◆ 100% of all branding materials to be PVC free.
- ◆ 100% of all paper used to be from sustainable sources.
- ◆ 100% of all printing to use sustainable printing processes.
- ◆ 100% of all seafood served or sold in Race Village and associated events, under the control of the Race to be from sustainable seafood sources. Where sustainable seafood sourcing is not available, no seafood will be served.
- ◆ 100% of all timber to be from sustainable sources.
- ◆ 100% of all cleaning products used onsite to be environmentally preferable.
- ◆ 100% of all eggs to be sourced from free range chickens.
- ◆ 100% of all coffee and tea served or sold to be from fair trade sources.
- ◆ 70% of all fresh produce to be sourced locally or from organic sources.
- ◆ Measurable reduction in materials use across all relevant sourcing sectors.
- ◆ 100% of all hotel nights for the Race production personnel, teams and guests to be in facilities with sustainability credentials, policies, programmes, commitments or actions.
- ◆ 100% of all catering service and public food offering in the Race Village to offer fresh, healthy and dietary diverse options.

Review our performance against these targets in the [Appendix](#).



Photo: Jesús Renedo/Volvo Ocean Race

As the Race is beginning its sustainability journey in parallel to its Ocean Health and plastic pollution campaign, and with a reasonably short time frame to impact sourcing decisions, we focussed our attention on what we knew we could achieve.

This narrowed our efforts to reducing giveaways, single-use plastic avoidance, avoiding once off PVC branding, sustainably sourced paper products, sustainable seafood and other local and environmentally sound food sourcing in our hospitality catering.

As the Race Villages and our hospitality programmes are delivered in coordination with many stakeholders, we could only influence and

inspire rather than control purchasing decisions when it came to food and beverage sourcing or manufacture of promotional material and branding by these other stakeholders.

We were able to mandate some elements, such as PVC-free branding, and not supplying plastic bottled water, using plastic straws, and single-use plastic food containers or bags.

Following are some of the sustainable sourcing achievements by our organisation and that of our stakeholders. Our ambition for the future is to more rigorously explore sustainable sourcing opportunities and include various requirements in future agreements and contracts.

Reducing materials volume

Within our own hospitality programmes we were successful in reducing the amount of giveaways and items produced.

In previous editions all the Race hospitality guests were provided a gift bag of branded goodies, included a printed programme. As with so many events, these items can actually be unwanted and sometimes discarded by guests.

In this edition of the Race it was decided to limit gifts to hospitality guests to caps. The reason for this is they are one size, pack together efficiently for transport between our stopovers, and are easy to re-order in response to guest number increases.

Additionally, we did not automatically give one to each guest, rather the hosts had them available at the check in desk (underneath where they could just not be taken freely) and guests were asked if they would like one.

At our awards night we did not give away gifts to any attendees, which previously had been the case. This was planned to intentionally reduce the amount of 'stuff' produced. Budget was funnelled to improved entertainment and experiential elements of the awards night.

Previous editions had a printed programme for attendees. In the 2017-18 edition this was replaced by a digital event app.

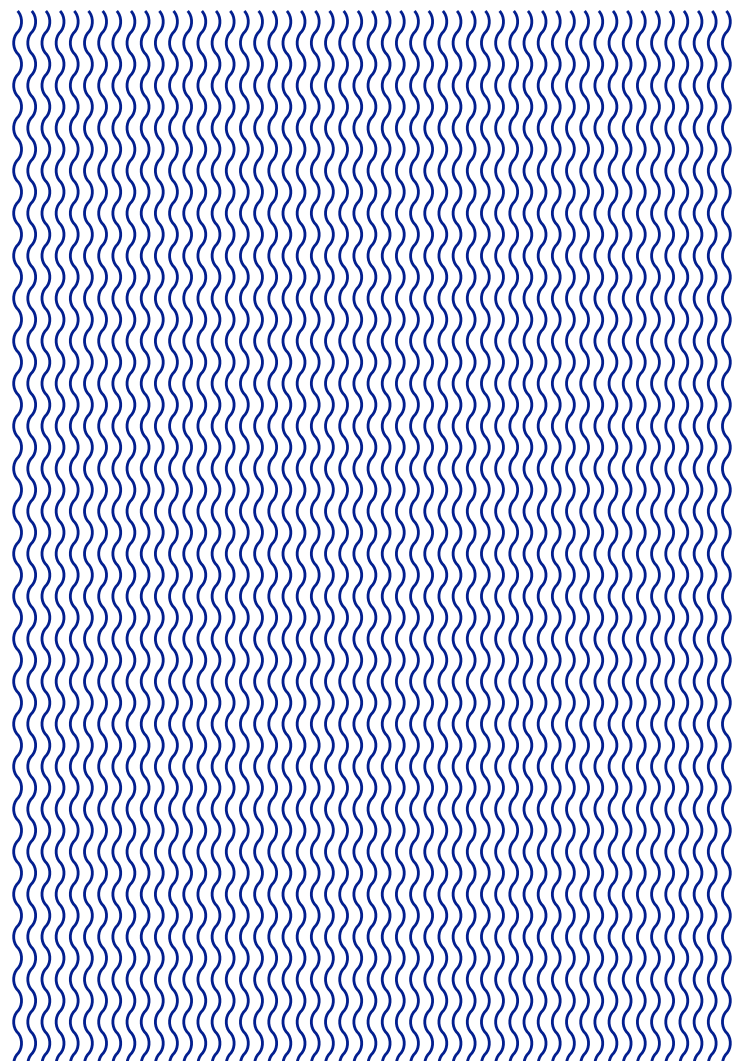
Online sharing platforms were also used, to communicate important event information to stakeholders.



Photo: Ainhoa Sánchez/Volvo Ocean Race



Photo: Pedro Martínez/Volvo Ocean Race



PVC-free branding

We required that branding (banners, flags, and other branding overlay such as entrance ways, information towers and stage signage) be PVC free.

In many Race Villages this was successfully achieved with a variety of non-PVC materials used, albeit still plastic such as polyester fabric.

In some destinations alternatives to PVC were either not available or the cost and transport of sourcing alternatives made them prohibitive.

We travel with our Race Village branding – flags, fence fabric, banners, and team base branding. Fifty per cent of the branding is the global and travelling branding and 50% is created locally to reflect our Host City and local sponsors. With twelve Race Villages and two transport runs, each of our branding kits were used six times. By the end of the Race they were considerably ‘used’ and at the end of their lives, and sent for recycling (rather than repurposing).

Each Host City produces the other 50% of the branding and this is single-use. With branding overlay one of the biggest materials uses for sponsored sporting events, a responsible sourcing and disposal plan is critical.



Photo: Jesús Renedo/Volvo Ocean Race

Sustainable food sourcing

Catering provided by our touring caterer **One Event Management** was the only food service under our direct control. The caterer performed exceptionally well in sustainable food sourcing, with local, organic, fair trade, responsible and sustainable ingredients making up a large part of menus in each stopover.

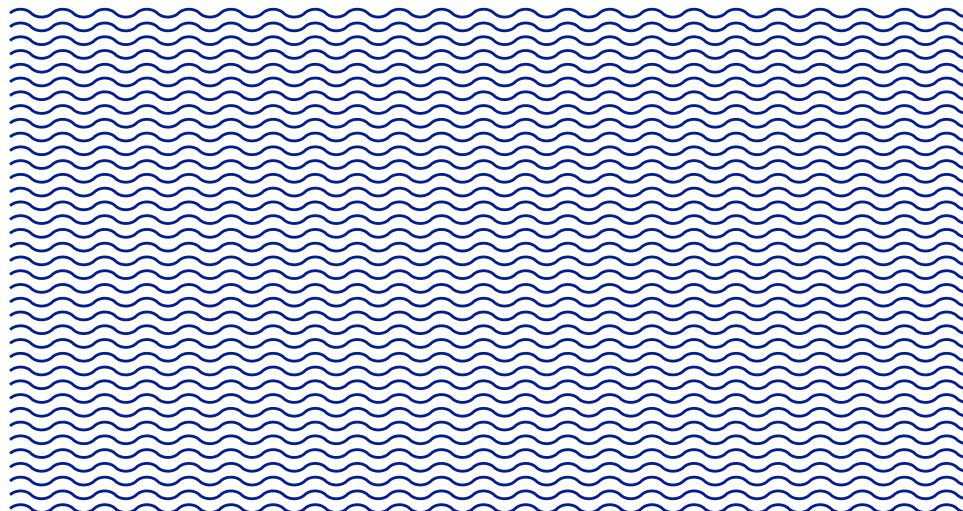
Food service for the public, crew, volunteers and local hospitality programmes were all arranged by our delivery partners or directly by sponsors and teams.

At our **Ocean Summits** where catering was not provided by One Event Management we worked with the local or venue's caterer to provide as much sustainable, eco-labelled and/or locally sourced food.

The **Gothenburg** stopover was a standout with regard to sustainable food sourcing. As part of the stopover's commitment to achieve a local event sustainability certification, special focus was put on sustainable food sourcing by the public food vendors. They achieved 48% of ingredients being eco-labelled and 22% of all meals served were vegetarian.



Photo: Pedro Martínez/Volvo Ocean Race



Climate change impacts

Minimising and managing our climate impact



Photo: Pedro Martínez/Volvo Ocean Race

We aim to minimise our travel and transport impact and to measure and plan for future climate impact management.

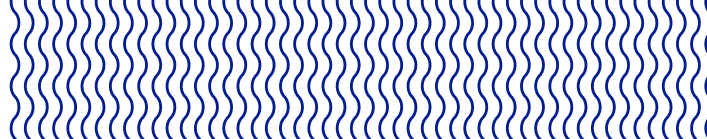


Photo: Sam Greenfield/Volvo Ocean Race



EO2 Modes of transport taken by attendees and participants as a percentage of total transportation, and initiatives to encourage the use of sustainable transport options.

EO3 Significant environmental and socio-economic impacts of transporting attendees and participants to and from the event.

GRI 305 Direct (Scope 1) GHG emissions.

GRI 305 Energy indirect (Scope 2) GHG emissions.

GRI 305 Other indirect (Scope 3) GHG emissions.

Our objective

Implement efficient production, transport and travel plans. Responsibly manage and report greenhouse gas emissions inventory.



Charting our course

To focus our efforts, we established the following objectives:

- Minimise production freight.
- Minimise production fuel consumption.
- Minimise production travel impacts.
- Minimise attendee travel impacts.
- Minimise Event and Race greenhouse gas emissions.
- Measure and report greenhouse gas emissions inventory.

Why this?

Producing a high quality global event means there is a necessity to transport event staff and equipment internationally. We acknowledge that the event contributes to global greenhouse gas emissions and consequently contributing to climate change.

We do not shy away from the impact of transporting the Race around the world. We are committed to establishing a management priority on analysing the greenhouse gas impacts of our activities and devising ways to reduce and balance those impacts.

Greenhouse gas emissions related to the Race are either created directly by our race and event operations or as a consequence of our wider activities, including teams, sponsors, delivery partners, media, hospitality guests and Race Village attendees.

Our tactical approach

We have a four-phase tactical approach to responsible greenhouse gas emissions management:

◇ **Measure**

◇ **Reduce**

◇ **Analyse**

◇ **Balance**

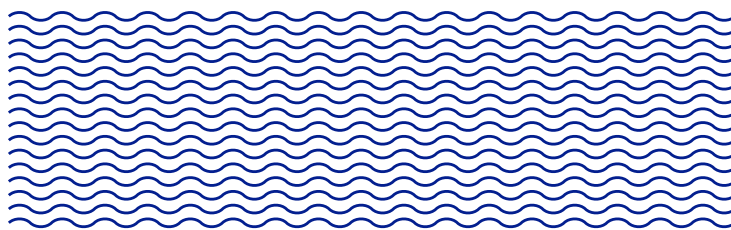
Our approach to responsible greenhouse gas management is firstly to be fully informed of greenhouse gas emissions impacts.

We have taken steps in our pre-planning and in real time during this edition of the Race to reduce where possible anticipated GHGs.

Gathering extensive GHG emissions data and undertaking analysis for reduction planning at future events is a key tactic.

And finally we are reviewing options to balance our greenhouse gas emissions this edition and will plan-in balancing for future editions.

Further details on our approach to greenhouse gas emissions measurement and reporting are detailed in our GHG Management Strategy, available for viewing to stakeholders upon request.



As we are beginning our greenhouse gas emissions management journey we have set the following targets to assist us to set a solid plan for the future.

Review our performance against these targets in the [Appendix](#).

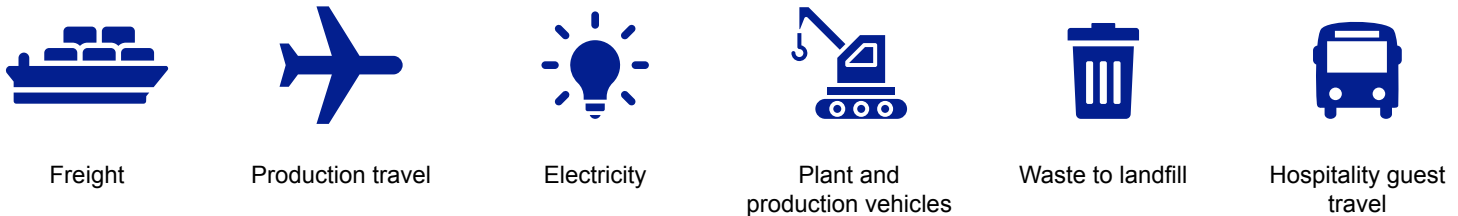
- Our success targets**
- ◆ 100% of all production freight and travel will be recorded and reported.
 - ◆ All short flight journeys taken by air will be reviewed for train travel for future trips and policy inclusion.
 - ◆ 90% attendee travel by local visitors via public transport or active travel.
 - ◆ Measure and disclose Event and Race greenhouse gas emissions.

What do we measure?

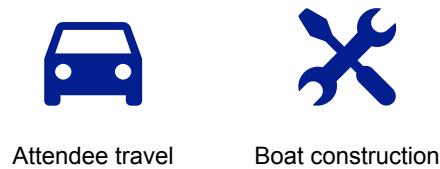
GHG emissions related to the Race are either created directly by our race and event operations or as a consequence of stakeholder’s related activities, including teams, sponsors, delivery partners, hospitality guests and Race Village attendees.

We therefore include in our overall GHG inventory for the Race, those GHG emissions which are either owned by Volvo Ocean Race S.L.U. (and The Boatyard), shared with Host Cities, or emissions generated by stakeholder activities associated with the Race.

We have split the GHG inventory into six broad categories
(regardless of ownership or scope categorisation)



Notable exclusions from the GHG inventory include:



Further details on the GHG inventory, analysis and justification for exclusions can be found in the Volvo Ocean Race 2017-18 GHG Report , upon request.

Results

Greenhouse gas emissions related to the Race are either created directly by the Race and event operations ('owned' or 'shared') or as a consequence of wider related activities ('associated'), by stakeholders such as teams, partners, Host Cities, hospitality guests and Race Village attendees.

We have identified the following stakeholders who share responsibility for GHG 'ownership' relating to the Race:

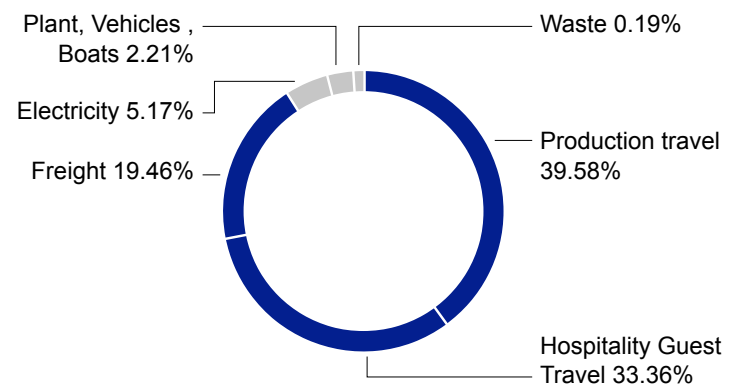
- Volvo Ocean Race S.L.U. including The Boatyard (Lisbon)
- Volvo Cars Group and Volvo Group
- Race Teams
- Race partners, sponsors and suppliers
- Contractors including travelling caterers
- Host Cities/delivery partners



Photo: Jesús Renedo/Volvo Ocean Race

Estimated GHG inventory proportion by source

Category	Percentage
Freight	19.46%
Production Travel	39.58%
Electricity	5.17%
Plant, Vehicles, Boats	2.21%
Waste	0.19%
Hospitality Guest Travel	33.36%



Avoiding landfill gas

18.38 tonne

GHGs avoided by sending food and serviceware waste for composting rather than landfill

Timber recycling

37.35 tonne

GHGs avoided by collecting wood waste and sending for recycling, chipping or biomass

Soft plastic

2.16 tonne

of GHGs avoided through collecting soft plastic and sending for recycling, rather than losing it to landfill and virgin plastic material needed for manufacture

Water refill points

68 tonne

of GHGs avoided through installing water refill points. This considers the GHGs avoided from manufacture and transport of plastic bottled water, less the GHGs of transporting the water refill points and installation staff

Smart power plan

53.6 tonne

of GHGs avoided in The Hague through efficient power planning leading to reduced fuel consumption

Biodiesel

14.8 tonne

of GHGs avoided through using a biodiesel fuel blend for generators and plant at our Newport stopover

Efficiency

We recognise that the Race may have considerable greenhouse gas emissions impacts and that this is amplified by our inbound tourism and hospitality efforts.

As with all inbound tourism event assets welcomed by destinations to build economic benefits to the region, the counter balance is the climate impact, especially from air travel and freighting.

The sports tourism sector, along with ourselves, have only in recent years been seriously looking at the climate impact of its activities.

We recognise that in order to reduce our climate impact we must reduce our greenhouse gas emissions both directly caused through our travel, transport and power demand, and indirectly through our purchasing decisions.

Likewise we can influence our stakeholders greenhouse gas emissions impacts from their flight and freight activities, purchasing, and also their consequential influence on their stakeholders (such as their corporate hospitality guests and client's participation in visiting our Race Villages).

Efficient production freighting

Together with Volvo Group and Volvo Cars Group, we moved more than 120 shipping containers around the world via sea freight. The scale of the production has grown since 2015 and we expect a gross increase in production transport impacts, however we put extreme effort into the most efficient packing and configuration of our container contents and shipping routes.

Shipping routes are the most efficient possible and we ship to the closest port to reduce ground freight impacts.

Air freighting has a larger impact compared with sea freighting. Efficiency planning by Volvo's onsite activation forecasted a 90% reduction in air freight compared to the previous edition of the Race.

Efficient production travel

To reduce the number of single car trips potentially taken by our touring personnel between the hotel and Race Village, we have staff shuttle buses at scheduled times. All staff are expected to use these shuttles unless work rosters conflict.



Photo: Ainhoa Sánchez/Volvo Ocean Race



Photo: Jesús Renedo/Volvo Ocean Race

Race visitors travel

The majority of our Race Villages had urban connectivity in place. This means that public transport options were maximised, communicated and where necessary, augmented.

In **Alicante** the Race Village is right in the heart of the city centre and all visitors walked in, perhaps with some taking the bus and tram to the closest stops. No car parking was available onsite.

In **Lisbon** the Race Village is located right next to the train line. Again no car parking was available and most visitors arrived by train, bus, or cycling. A cycle parking station was set up just inside the entrance to the Race Village.

In **Hong Kong** and **Guangzhou**, shuttle buses were in place. No public car parking was available at the Hong Kong site.

In **Melbourne, Auckland, Cape Town** and **Itajaí**, the Race Villages were in the heart of downtown, with majority of attendees arriving by foot or public transport. Cycling was popular in Auckland. In Cape Town bikes were available to all production staff to get between the quite spread out Race Village.

In **Newport** cycling was actively promoted, with two 'park and ride' locations in the town with a lovely 5km or so ride out to the Race

Village which was located on the peninsula in a natural reserve (Fort Adams park). A total of 830 bikes were parked in the bike parking station provided by Bike Newport over the duration of the stopover. Dedicated harbour shuttles transported visitors and event staff from Newport downtown and Jamestown. A total of 6,731 round trips were undertaken by ferry to the Race Village.

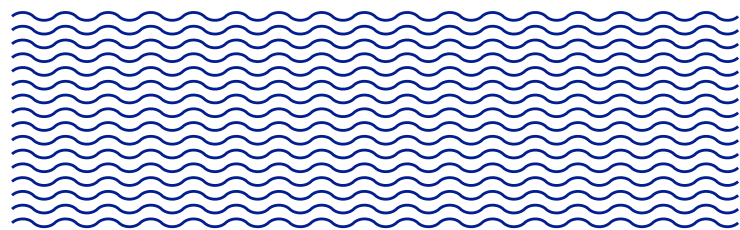
In **Gothenburg** a programme between Volvo Buses and city of Gothenburg – 'ElectriCity' had electric buses bringing visitors from the city to the Race Village. A beautiful vertical garden walled installation was at the entrance to the Race Village with buses coming right into the installation to offload passengers.

In the visitor survey, commissioned by Göteborg & Co, 76% answered that they came to the event by public transport or active travel (bike, walking).

Visitors were also able to access the Gothenburg Race Village via a ferry service.

Volvo electric buses were also used in The Hague, with a bus charging point right in front of the Race Village.

Not surprisingly, the majority of visitors arrived by bicycle in **The Hague**, including all our event staff who were assigned bikes for commuting to the Race Village.



GHG data collection

Greenhouse gas measurement and analysis is underway and will be available in a separate report.

In approaching our GHG inventory measurement is important it includes all relevant sources, to get a 'complete picture', particularly of flight impacts to the event. This means that our scope has been broadened further than just our own organisation's impacts. We include data collection and analysis of our stakeholder's 'owned' GHG emissions (partners, teams, sponsors) such as their staff travel and that of their guests and hospitality programmes.

We have detailed our organisational boundaries, so it is clear who 'owns' which GHGs. This is to be able to understand our organisational impacts and also the extent of those related GHGs that would not have occurred if we had no Race. While they aren't 'owned' by the Race, we are still complicit in their creation.

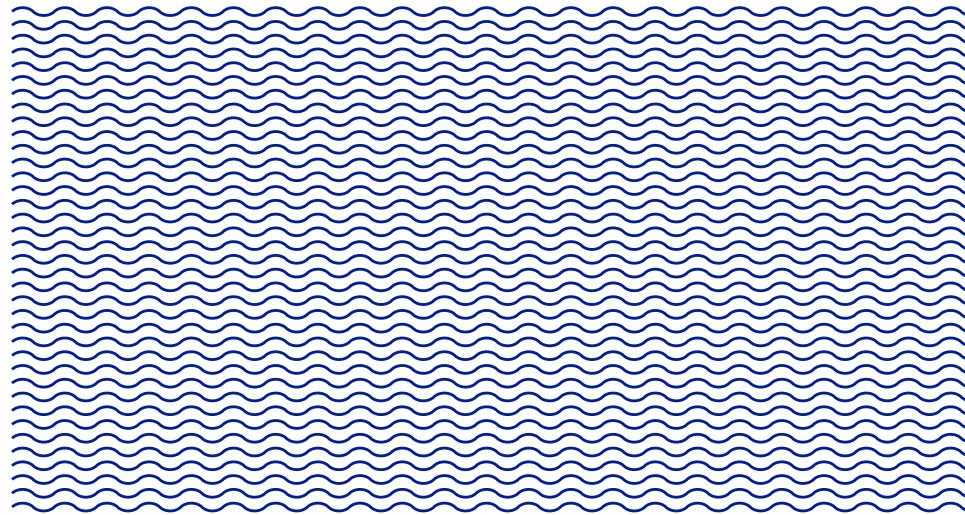
We have identified the following stakeholders who share responsibility for GHG 'ownership' relating to the Race:

- Volvo Ocean Race S.L.U. including The Boatyard (Lisbon)
- Volvo Cars Group and Volvo Group
- Race Teams
- Race partners, sponsors and suppliers
- Contractors including travelling caterers
- Host cities/delivery partners

Our GHG inventory measurement is guided by various protocols and standards, such as the Greenhouse Gas Protocol¹ (international), ISO 14064², PAS 2050³ (UK), PAS 2060⁴ (UK), National Carbon Offset Standard⁵ (Australia), Global Reporting Initiative Event Organiser Sector Supplement⁶ (international).



Photo: Pedro Martínez/Volvo Ocean Race



¹ Greenhouse Gas Protocol: www.ghgprotocol.org

² ISO 14064-1:2006 Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals: iso.org/iso/catalogue_detail?csnumber=38381.

³ PAS 2050:2011 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services: shop.bsigroup.com/en/forms/PASs/PAS-2050/

⁴ PAS 2060 Specification for the demonstration of carbon neutrality: bsigroup.com/en-GB/PAS-2060-Carbon-Neutrality/.

⁵ National Carbon Offset Standard: environment.gov.au/climate-change/publications/carbon-neutral-program-guidelines-v4.

⁶ Global Reporting Initiative Event Organiser Sector Supplement (G4 Guidelines) <https://www.globalreporting.org/resource/library/GRI-G4-Event-Organizers-Sector-Disclosures.pdf>



Leave a positive legacy

All of our Sustainability Programme features are designed to leave a lasting positive legacy.

Our influence extended to our supply chain and partners with so many instances of companies changing their policies and work practices. Many examples can be found throughout this report.

How did we leave a lasting legacy?

We aimed to leave a lasting and positive impression through all our Sustainability Programme features.

Our Science Programme offered valuable data to help the scientific community better understand Ocean Health and the pervasiveness of plastic pollution. A total of 30 drifter buoys were deployed and 86 microplastic samples taken, of which 93% contained microplastic particles.

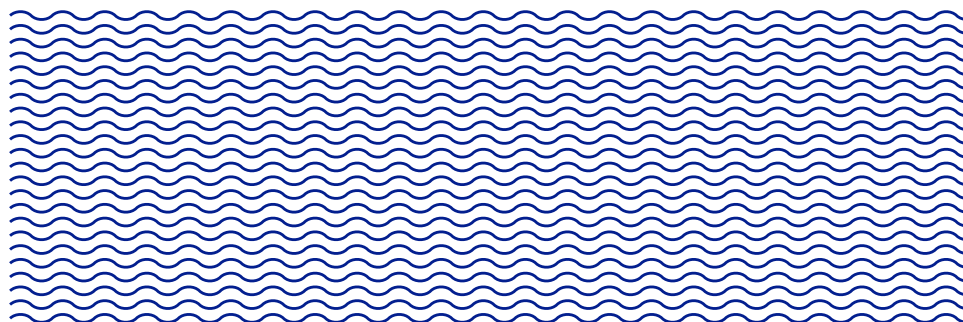
We inspired young people through our Education Programme, to continue to influence their families, schools, sailing clubs and communities to reduce their plastic footprints and to avoid plastic pollution through actions they will take every day. 110,000 children from forty countries took part in our Education Programme, which is available in seven languages.

Our Ocean Summits have acted as catalysts for commitments at the highest level and have also inspired individual action. At our

seven events, 225 expert speakers and 1,827 decision makers attended. Countries, states, cities, companies and sports federations announced at our Ocean Summits their commitments to Clean Seas and solving plastic pollution.

The way we have conducted our sustainable event operations has influenced our delivery partners' event production practices, especially single-use plastic policy and compostable collection. We held sustainable event management workshops and produced a guide to reducing single-use plastic at sporting events.

Our Sustainability Programme was amplified by our communications programme, and our messages were able to reach tens of millions of people around the world, including online fans, followers and many more who simply weren't aware of the scale of the problem. A total of 24,102 online articles were published by us and other media outlets on our Sustainability Programme, attracting 820,555,488 online views.



Information and science

Providing knowledge and data



Photo: Jeremie Lecaudey/Volvo Ocean Race

We can use our race to provide accurate information and to collect valuable scientific data.



Photo: Sam Greenfield/Volvo Ocean Race



EO11 Number, type and impact of sustainability initiatives designed to raise awareness, share knowledge and impact on behaviour change and results achieved.

EO12 Nature and extent of knowledge transfer of best practice and lessons learned.

EO13 Number, type and impact of physical and technological legacies.

Our objective

Advance knowledge and obtain data on Ocean Health and plastic pollution.



Charting our course

We established the following objectives in our ambition to provide information and support Ocean Health science:

- Increase awareness and action for the issue of Ocean Health and plastic pollution.
- Use the Race to collect scientific data on Ocean Health and marine plastic pollution.

Why this?

Bringing awareness to the issues of Ocean Health and plastic pollution, within the context of an around the world sailing race, presented the opportunity to build empathy for the issue with our stakeholders.

Offering information backed by science and our alignment with UN Environment Clean Seas gave confidence to our stakeholders that these are urgent issues that must be addressed. We hoped that the combination of context, creating empathy, and trustworthy information sources would combine to create enduring commitment and action by our stakeholders.

Providing accurate information on the state of Ocean Health and to the scientific community's research data allowed us to authentically contribute and play a valuable role in restoring Ocean Health. The inclusion of our Science Programme brought rigour to our Sustainability Programme, offered exposure to our scientific consortium of their ongoing research efforts, and brought an additional sense of purpose to our sailing teams participating in the project.

Our tactical approach

The use of the Race to gather scientific data on Ocean Health and microplastic concentration was a critical tactic in establishing our serious intentions for our Sustainability Programme.

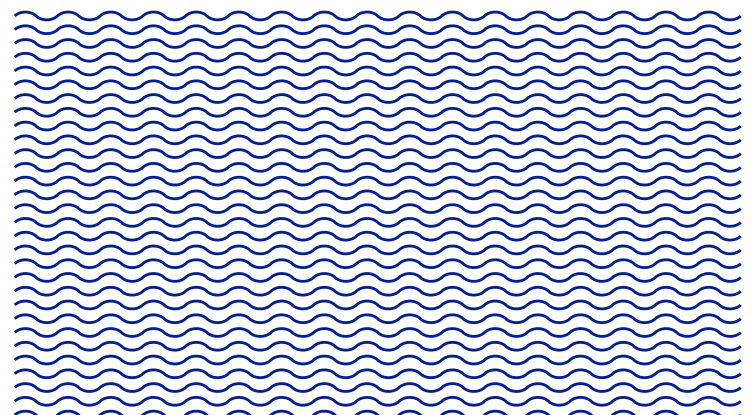
The rigour behind our programme was established through our alignment with UN Environment Clean Seas, 11th Hour Racing, establishing our Ocean Summits and Education Programme, and our attention to our own plastic footprint.

We created a communications strategy that conveyed our information in a series of reports, videos, news stories and social media content.

With this sound base we were then in a position to ask our stakeholders to make serious commitments to supporting Ocean Health, preventing plastic pollution and reducing their own plastic footprints.

This was done primarily through our call to action via the Clean Seas pledge.

To leave a positive legacy, we wish to track awareness and action over time.



We established the following targets to track the success of our objectives:

Review our performance against these targets in the [Appendix](#).



Our success targets



Track awareness and action over time through surveys and interviews, leading to measurable target creation.



35% of attendees visiting the Race Village will leave with increased awareness of at least one issue related to Ocean Health, as measured by entry/exit surveys.



Successfully implement our race boat based data gathering programme, through deployment of monitoring devices and collection of samples.

Our impact in numbers

20,000

people signed the Clean Seas pledge through our campaign: our hosts New Zealand, Spain, Wales, State of Rhode Island, City of Itajaí and City of Newport

114,000

school children and adults participated in our Ocean Health and plastic pollution Education Programme

2,000

decision makers attended our seven Ocean Summits to hear from 225 expert speakers

30

scientific drifter buoys successfully deployed

25,826

one minute averages of oceanographic measurements recorded

86

microplastic samples analysed

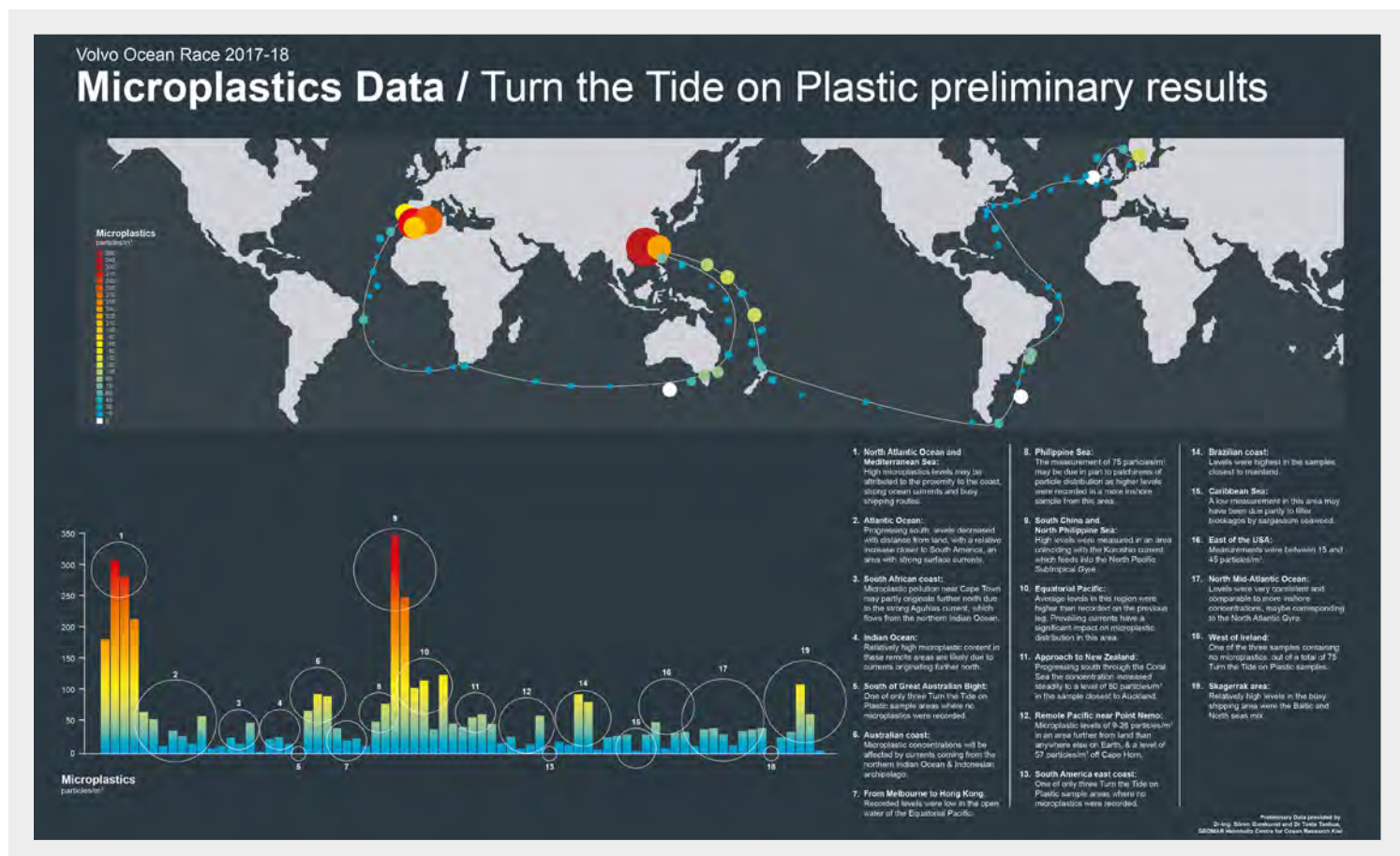


Photo: Jesús Renedo/Volvo Ocean Race

Being viewed as a trusted source of information on the issues of Ocean Health and plastic pollution, along with providing robust scientific data has allowed us to have our communications well received and our call to action heard by our stakeholders.

Our efforts to establish our credibility and our approach to calling for commitment and action by our stakeholders can be viewed in other sections of this report (Education Programme, Ocean Summits, Footprint Management, Clean Seas alignment and commitment).

Following are examples of our focus on a lasting legacy with our stakeholders and details on our Science Programme.



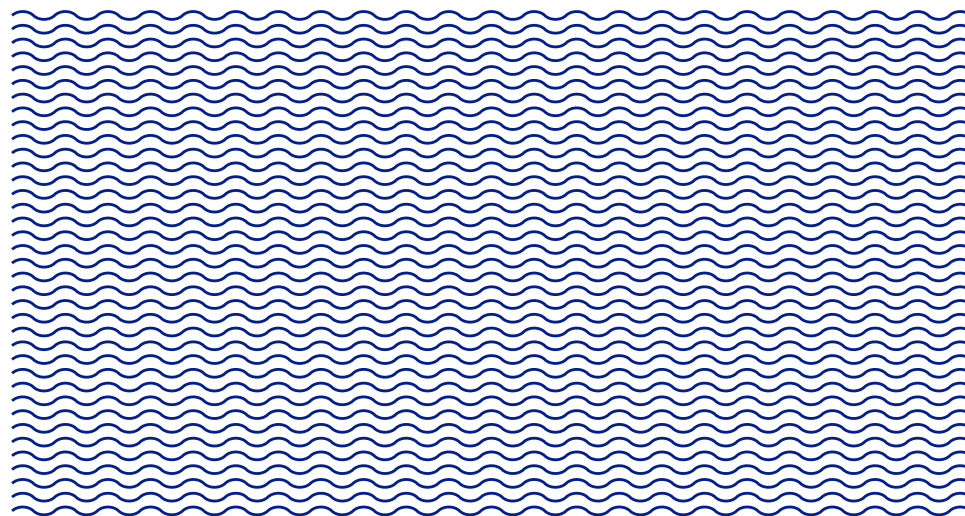
[View the detailed map](#)

The samples collected by Turn the Tide on Plastic over the course of the whole race generated a dataset that provided an internally consistent picture of microplastic distribution in the world's oceans.

Microplastics were found in 93% of samples collected along the route, including those taken from close to Point Nemo in the South Pacific, the most remote location in the world's ocean.

The highest microplastic concentration was recorded in the waters of the South China Sea and an adjacent sample from the north Philippine Sea, east of Taiwan, also had a relatively high level. North European waters showed the second highest level recorded. High concentrations were recorded in samples from the Mediterranean and the inshore Atlantic close to Portugal and Spain.

The research and preliminary results are described in more detail later, and in our [Science Programme Final Report](#).



Clean Seas Pledge

After engaging our stakeholders and providing information on the issue, our first action we asked stakeholders to take was to join the Clean Seas campaign by making a commitment via a pledge.

Pledges were established for:

- Government
- Private sector
- NGOs and other organisations
- Individuals

A total of 20,000 pledges were received.

The future editions of the Race offer us the opportunity to track the progress of pledges, commitments and actions, particularly with our supply chain, the private sector locally, host cities and other governmental agencies.



See more analysis of our pledges in the [case study](#).

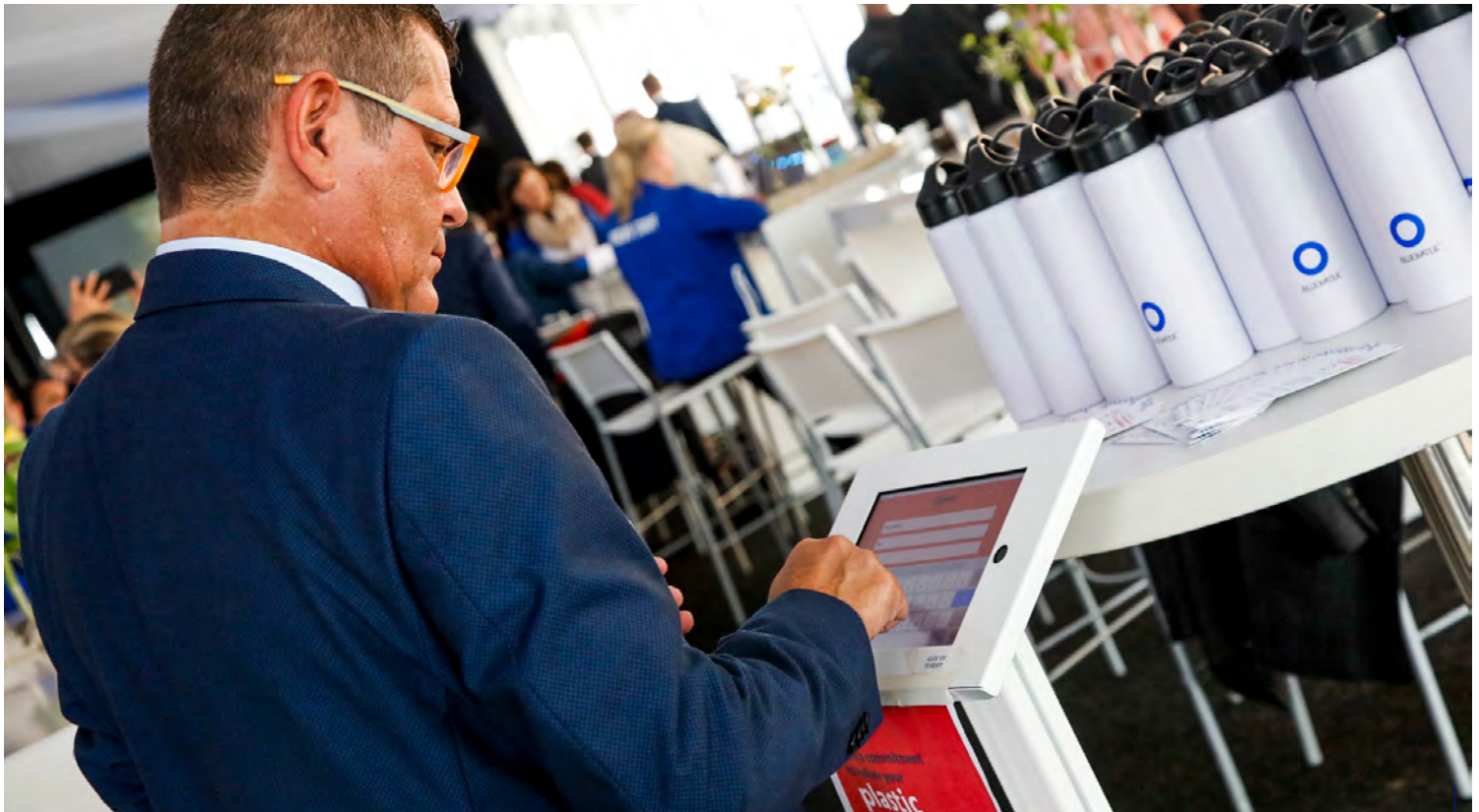


Photo: Jesús Renedo/Volvo Ocean Race

Education Programme impact

Retention of knowledge and transfer of engagement and interest into action is another element we wished to track.

We are exploring how we can monitor level of knowledge, enthusiasm and action amongst young people involved in our Education Programme, over time.



Photo: Ainhoa Sánchez/Volvo Ocean Race

Individual awareness and action

We surveyed our Race Village attendees on their level of awareness and action they took to reduce their plastic footprint and to prevent plastic pollution.

- How well do you understand the issue of ocean plastic pollution?
- Do you use a refillable water bottle?
- Do you recycle at home?
- What actions have you taken in the last week to reduce your plastic footprint?
- Volvo Ocean Race is doing a good job to promote the issue of ocean plastic pollution and reducing its own plastic footprint.

A total of 2,214 respondents were surveyed across our stopovers in English, Spanish, Portuguese and Chinese.

We conducted research at our stopovers to see what proportion of people have and remembered to bring their reusable bottle.

Of the people surveyed 85% own a water bottle and 15% did not own a bottle. Of those that own a water bottle, 46% brought their bottle to the Race Village, 31% knew they should bring it but forgot to, and 23% did not know to bring the bottle.

These are quite good figures, but show there is more work to be done to remind or inform people to bring their bottles to the Race Villages (and all events).

Additionally, 10,000 respondents were surveyed online across ten global markets. The follow page summarises the questions and findings.



Photo: Jesús Renedo/Volvo Ocean Race



Photo: Pedro Martínez/Volvo Ocean Race

◇ **Which of the following words below would you use to describe the following events? (Environmentally friendly, sustainable).**

It is outside of Europe where the environmental credentials of Volvo Ocean Race resonated most strongly. Brazil leads in both association with Environmentally Friendly and Sustainable (along with China). Spain scored us well also!

◇ **How well do you know or understand the issue of plastic pollution in our ocean?**

European markets generally display a higher level of understanding of the issue of plastic pollution in our ocean.

In France understanding is highest with 41% claiming an excellent understanding.

In contrast 41% of Chinese have limited understanding or are unaware of the issue.

◇ **In your opinion, how important is raising awareness and fighting plastic pollution in our ocean?**

Across the majority of markets more than half feel that fighting plastic pollution is extremely important.

Only in China and, surprisingly, the Netherlands do less than 50% feel the issue is extremely important.

Brazil leads the way with 88% seeing plastic pollution as an extremely important issue.

◇ **Thinking about your home, do you recycle household waste?**

Italy and the UK displayed the highest levels of engagement with household waste recycling.

◇ **Do you use a refillable water bottle?**

Brazilian, Swedish and Spanish are the most likely to make use of refillable water bottles rather than single-use plastic with more than 70% always or regularly using a refillable water bottle. However across all markets it was more than 50%. France was the lowest scoring country.

Science Programme

The Science Programme brought together an elite scientific consortium to capture data that will contribute to a better understanding of the world's ocean and climate.

Environmental and oceanographic data from onboard sampling, scientific drifter buoys and meteorological measurements contributed a vast amount of data especially from critical data-sparse areas to improve the reliability of forecasts and predictive models.

Our scientific research and data collection contributed valuable datasets to increase scientists' understanding of our endangered seas and climate change impacts. Variables of ocean environmental conditions are remarkably under-sampled, particularly in geographically remote areas outside of routine shipping routes.

We sought to capitalise on the remote route of the Race by capturing data relating to ocean and climate health from areas otherwise largely inaccessible to scientists. There were three means of data collection:

- meteorological data measured by every boat;
- deployment of scientific drifter buoys;
- direct sampling of seawater to measure oceanographic parameters and microplastic concentrations.

Highlights

30

scientific drifter buoys successfully deployed

25,826

one minute averages of oceanographic measurements recorded

86

areas sampled for microplastic

We established collaborations with:

GEOMAR Helmholtz Centre for Ocean Research supported by Cluster of Excellence - Future Ocean Kiel; instrumentation developers SubCtech GmbH and bbe Moldaenke; the National Oceanic and Atmospheric Administration (NOAA); the IOC/WMO* Joint technical Commission for Oceanography and Marine Meteorology (JCOMM); with essential input from the Boatyard and race teams who deployed equipment, especially Turn the Tide on Plastic and Team AkzoNobel who directly sampled seawater. Volvo Cars funded the onboard sampling equipment through profits from the sale of their Cross Country Volvo V90 Ocean Race edition cars.

* Intergovernmental Oceanographic Commission (UNESCO) / World Meteorological Organisation



Meteorological data

Direct measurements of meteorological conditions relayed by each boat to race headquarters were collated and shared to be incorporated into global databases.

Every weather modeller can access and utilise the data for weather prediction and climate studies, and more importantly the archived data will be available forever to the scientific community.

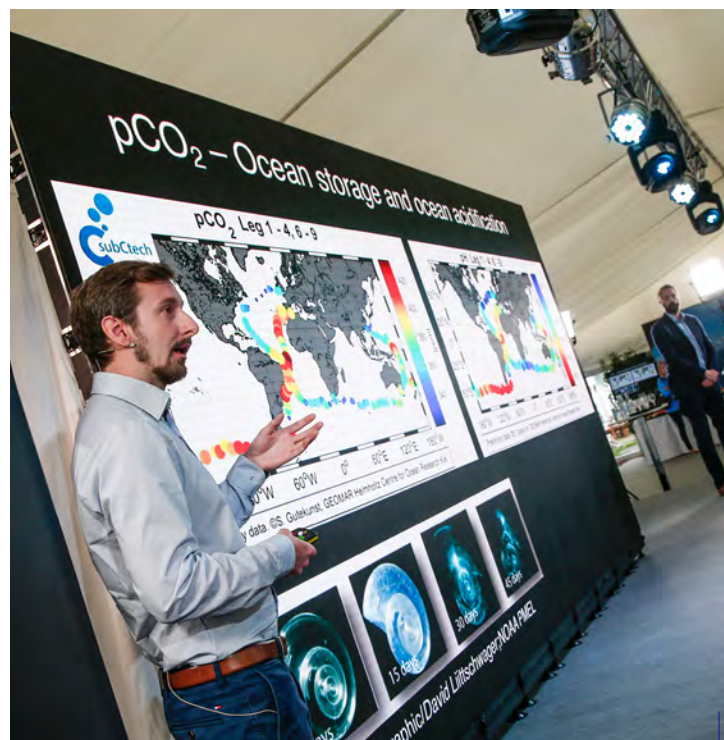


Photo: Jesús Renedo/Volvo Ocean Race



Photo: Ugo Fonollá/Volvo Ocean Race

Ocean Health data

Parameters relating to overall ocean, climate and environmental conditions were measured directly.

A total of 25,826 one-minute averages were recorded to inform scientists, for example about: the ocean's annual capacity to absorb excess atmospheric carbon dioxide; the extent of ocean acidification; sea temperature; ocean productivity; upwellings, which indicate climate cycles such as El Niño.

A total of 30 surface drifter buoys were deployed by the racing boats and will continue to transmit information for up to two years about sea surface temperature and ocean currents.



Photo: Ainhoa Sánchez/Volvo Ocean Race

Microplastic sampling

Our microplastic sampling has generated an internally consistent near-synoptic picture of the distribution of microplastics in our ocean, with the potential to contribute to the establishment of a worldwide standardised approach to microplastic sampling, analysis and instrumentation.

- 86 locations were sampled.
- There were microplastic particles detected in 93% of samples.
- Microplastics particles were detected in samples from some of the race route's most remote locations.
- Analysis is progressing for peer-reviewed publication of the research.
- The preliminary results have reached audiences worldwide.

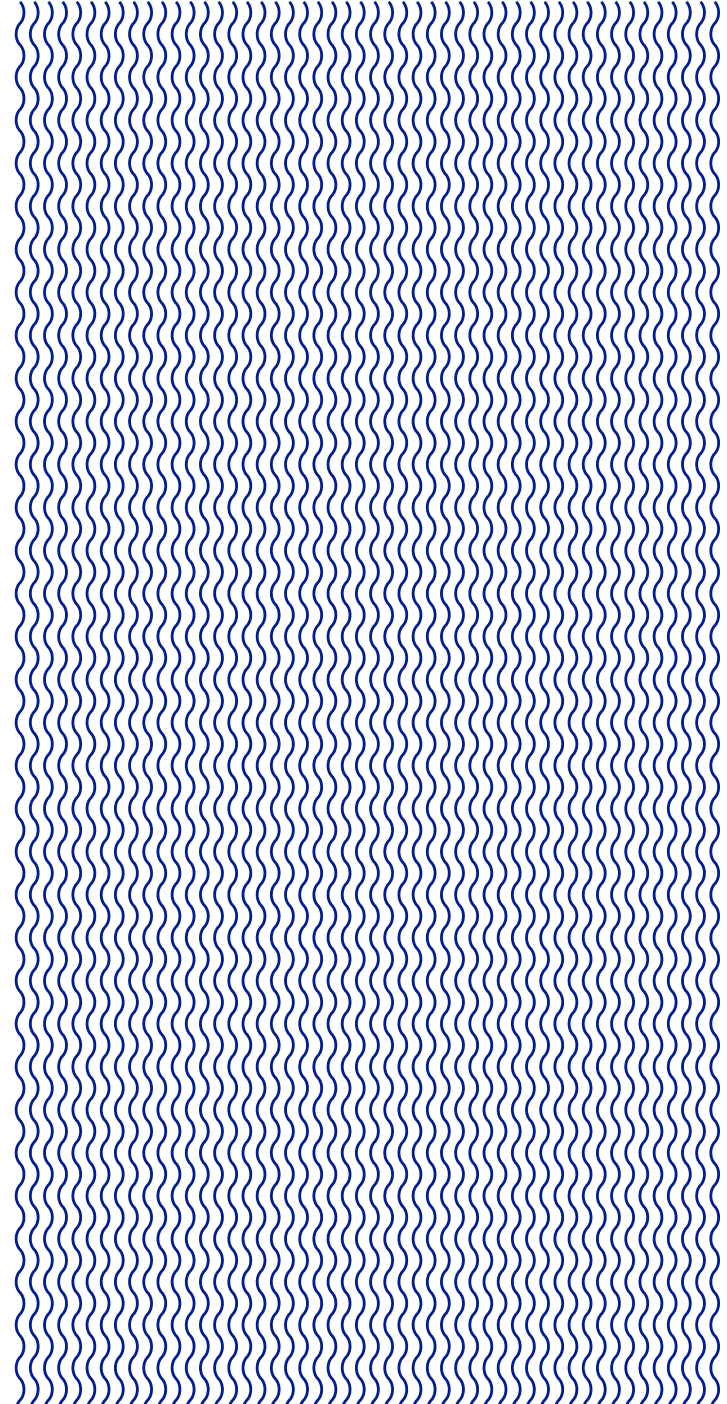
Science workshop

To optimise the contribution to science of the race's pioneering ocean microplastic research a workshop was held in **The Hague**. The workshop facilitated a cross-sector brainstorm focussed on the science of microplastic and nanoplastic pollution issues. The objective was to provide a framework and direction for a collaborative and aligned approach to advance ocean plastic pollution research and to increase data accessibility and its impact.

The workshop brought together scientists from universities and recognised laboratories; medical experts; instrumentation experts; private sector, NGO and UN representatives; race teams and Science Programme partners.

There was consensus that essential requisites going forward are:

- The establishment of an organisation to coordinate research and standardisation of data and data collection;
- Identification of a host or creation of a federated database for data;
- Increased engagement with policy makers and the public;
- Development of a consortium to collaboratively research aspects of nanoplastic pollution including isolation, characterisation, impact and mitigation studies.



Citizen science in action

We installed a **Seabin** in Race Village marinas to filter water and collect litter and debris. The Seabin is a floating rubbish bin that was attached to the Race Village marina or pontoon. It moves up and down with the tide and pumps water through so that any floating debris can be captured in a catch bag.

The Seabin contents were monitored daily, mostly by on-site volunteers. This citizen science contributed data to the Seabin Project database. Significantly the on-site presence of the Seabin gave visitors a stark insight into local ocean litter issues.

Many of our beach cleans also contributed data to local or national clean up registers.



Photo: Pedro Martínez/Volvo Ocean Race

The 'Science Programme' case study provides further detail.

Innovation and solutions

Innovation and solutions to sustainability challenges



Photo: Jesús Renedo/Volvo Ocean Race

Through our Race, Ocean Summits, and our supply chain we support and showcase solutions and innovations in plastic pollution prevention, single-use plastic reduction, environmental protection and sustainability.



Photo supplied by 11th Hour Racing



EO11 Number, type and impact of sustainability initiatives designed to raise awareness, share knowledge and impact on behaviour change and results achieved.

EO13 Number, type and impact of physical and technological legacies.

Our objective

Support innovation and technical solutions to sustainability challenges for events, sailing, Ocean Health and plastic pollution.



Charting our course

We established the following objectives in our ambition to support innovative solutions:

- Support sustainable sailing boat design and innovation.
- Showcase and disseminate information on sustainability solutions.

Why this?

The solutions to ocean plastic pollution lay in innovation - new technologies, new systems, new approaches, and importantly, new attitudes to recognising the problem.

Supporting innovation can be achieved through encouraging the supply chain to develop or source more sustainable solutions, or actively seeking out new suppliers and solutions providers.

Organisations should work to develop new ways of doing things, taking bold steps to advance best practice.

Within sailing, our sector has recognised many issues with boat building, operations and disposal - materials and their effects, energy and climate impacts, and of course disposal of boats at their end of life.

Our Race Villages, business agreements, accessibility to sailing, hospitality programmes, and many more features of the way our Race, business and operations function, have the potential to be much improved through innovation and technology.

Our tactics

Our first tactic was to establish a global series of Ocean Summits. At these events, held in seven of our stopover, the focus was on solutions to the Ocean plastic pollution crisis, offering networking and exposure opportunities.

Our Race Village partners were encouraged to place sustainability and plastic pollution solutions into the Race Village experience.

Our focus on sustainable event management operations encouraged our delivery partners to look to sustainable materials and operating procedures.

We hosted or participated in industry workshops to explore, educate or enable networking for sustainability solutions - marine sector, event sector and science.

We throw our support behind any sailing and sports initiatives for sustainability topics.

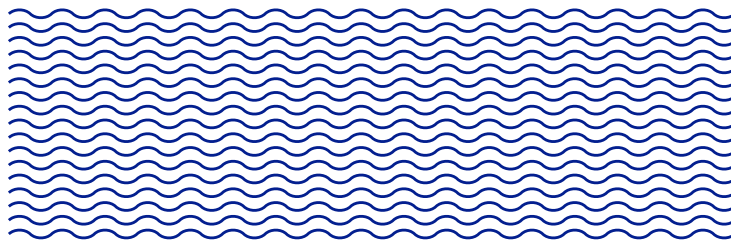




Photo: Jesús Renedo/Volvo Ocean Race

Many of the solutions to sustainability challenges in our world today will come through innovation. As urgency increases and solutions must be found, ingenuity blossoms.

Ocean Summits

Over the course of the Race, a series of Ocean Summits brought together a range of key players from the worlds of sport, industry, government, academia, science and ocean advocacy, to showcase innovative solutions to the global crisis of ocean plastic and to inspire action to help turn the tide on this urgent and most pressing issue.

By convening this mix of advocates in strategic, international locations, the events were planned to inspire and mobilise people, during a decisive moment in history, to develop an action plan to help safeguard the health of our oceans forever.

The events featured regional and national governments, businesses and a range of ocean advocates leading by example, making solid commitments to help stop the ubiquitous spread of plastic in our seas.

Exclusive, groundbreaking data on the amount of microplastics in our ocean collected by the race's Science Programme was also revealed at the summits.

Find out more about the [Ocean Summits](#).

Ocean Summits were held in seven stopover cities:

- ◆ Alicante - 18 October 2017
- ◆ Cape Town - 7 and 8 December 2017
- ◆ Hong Kong - 22 January 2018
- ◆ Newport - 18 May 2018
- ◆ Cardiff - 5 June
- ◆ Gothenburg - 18 June
- ◆ The Hague - 28 and 29 June 2018

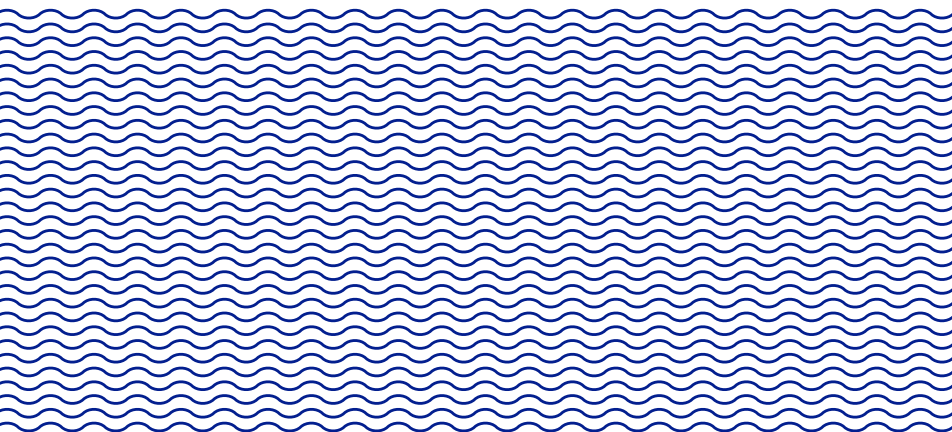




Photo: Pedro Martínez/Volvo Ocean Race

Other workshops and innovation

During the **Auckland** stopover, the Race's sustainability team hosted NGOs, government, companies, scientists, academics and activists in a networking function in the Volvo Pavilion.

The gathering gave an opportunity to celebrate the commitments and progress in New Zealand around this issue, to hear from Bianca Cook, our kiwi sailor on Turn the Tide on Plastic, and to witness the signing of New Zealand government as the 42nd country to officially partner with Clean Seas. [Read more](#) or [view the news](#).

During the **Hong Kong** stopover we hosted a Sustainable Event Workshop. This followed on from a similar workshop conducted by The Purpose Business and The Hong Kong Jockey Club in June 2017. The focus of the workshop was reducing single-use plastic at events in Hong Kong.

Discussed was the recent ban on exporting recyclable waste to China, the upcoming introduction of a landfill tax in Hong Kong, the trouble with using compostable serviceware when no composting facilities exist, the

Drink Without Waste initiative to reduce single-use disposable beverage containers, and the controversy of chain of custody of recyclable materials collected in Hong Kong, actually making it to recycling facilities.

The event was attended by eighty Hong Kong based event industry participants. The panellists included local event organisers, suppliers and materials specialists. Event solutions and cross-sector solutions were discussed. After the workshop, a tour around the Race Village to showcase the Race's initiatives was conducted.

A Plastic Planet and Ekoplaza showcased what a plastic free aisle can look like in their pop-up activation. The idea of a plastic-free grocery aisle was first discussed at the Ocean Summit in Alicante, and within four months became a reality with Ekoplaza opening the first.



Photo: Merrin Pearse/The Purpose Business, Hong Kong



Photo: Pedro Martínez/Volvo Ocean Race

At the Itajaí stopover, **Volvo Penta** and the Race held a one day creative hack-a-thon with design school Redhook School - **The Creative Race**.

Young creative professionals were charged with the brief of designing a campaign or project to engage boat owners (with Volvo Penta engines) in the issue of marine plastic pollution.

Huge numbers of ideas were generated including a game, including geo-tagging of marine litter on the existing Volvo Penta app, art exhibition, communications campaigns and using plastic as a currency to incentivise its collection.

City of Göteborg installed a pavilion space in the Race Village next to Volvo Pavilion at the Gothenburg stopover. Utilising converted shipping containers, plants and wooden structures, the installation celebrated many sustainability features of the city. The pavilion consisted of six companies and administrations of the City of Gothenburg feature Swedish innovation. In the central area were daily seminars including one on circular economy and smart cities. [Read more.](#)

Also at our Gothenburg stopover, free electric Volvo Buses, celebrating the **ElectriCity** project, ran every 10 minutes from the city centre delivering visitors right into the Race Village into a beautiful plant filled

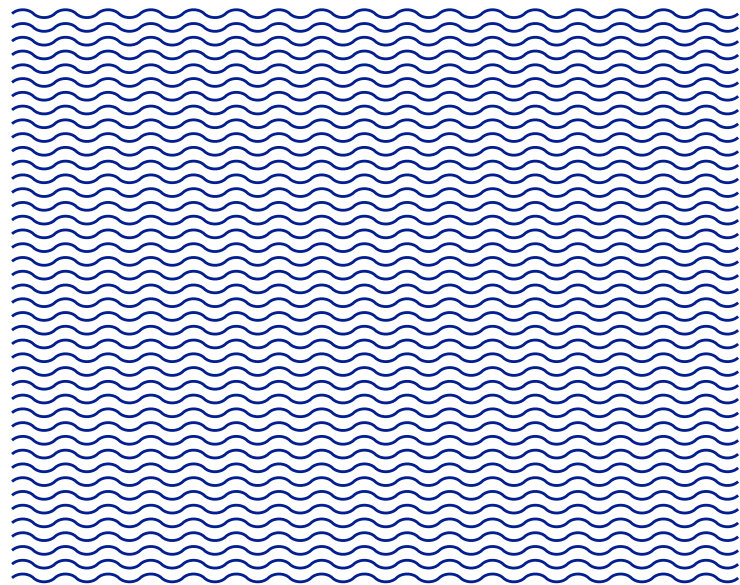
vertical garden pavilion. These buses will now go on to be part of the ongoing ElectriCity project in the city.

At The Hague Race Village **The Innovation Pavilion** gave leading start-ups, scale-ups and SMEs the opportunity to present their smart ways to improve the world and the environment. [More.](#)

In **Newport**, a workshop was held in association with 11th Hour Racing and the Cradle to Cradle Products Innovation Institute, on Circular Economy in the marine sector. More than fifty people attended, representing boat building and supply chain.

In Newport, the **One Ocean Exploration Zone**, presented by 11th Hour Racing, offered hands-on opportunities for kids and adults to discover ocean science and learn more about protecting the marine environment.

More innovative solutions to sustainability issues were on show at the Newport Race Village. On the pontoons where the race boats were berthed, there was a solar powered floating dock on display by [Blue Isles Power Docks](#). Adjacent to that was an operational trash skimmer, which is working year round as part of an 11th Hour Racing and [Clean Ocean Access](#) activation.



Knowledge and excellence

Advancing best practice in event sustainability management



Photo: Ainhoa Sánchez/Volvo Ocean Race

We aimed to plan and manage the event as sustainably as possible. We used our diverse destinations, extensive stakeholder network and ongoing improvement during the Race to share great ways of producing events sustainably with our stakeholders, host cities and delivery partners.

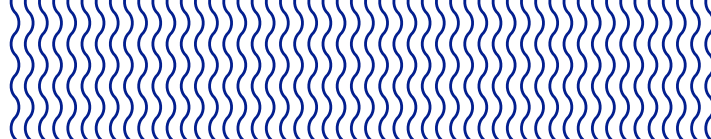


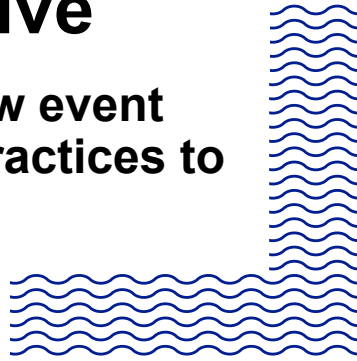
Photo: Jesús Renedo/Volvo Ocean Race



EO12 Nature and extent of knowledge transfer of best practice and lessons learned.

Our objective

Disseminate new event sustainability practices to stakeholders.



Charting our course

To focus our sourcing efforts by our organisation and those purchasing on our behalf, we established the following objectives:

- Plan and deliver events in alignment with international and local sustainable event standards and protocols.
- Introduce new event sustainability practices to stakeholders.

Why this?

Sustainable event management practice has been a serious focus for the event sector for about a decade. For sports events, with leadership from the Olympics movement, in recent years there has been an escalation in the number and degree of attention to sustainability management.

Combined with increasing expectations by stakeholders, requirements by law, and social pressure by communities and customers, companies and organisations are expected to be responsible participants in sustainable development.

Large scale and high profile events not only have an obligation to be responsibly and sustainably produced, but have an enormous opportunity to use the event for good, amplifying positive messages around environmental and social justice issues and in using the event to showcase sustainable living in action.

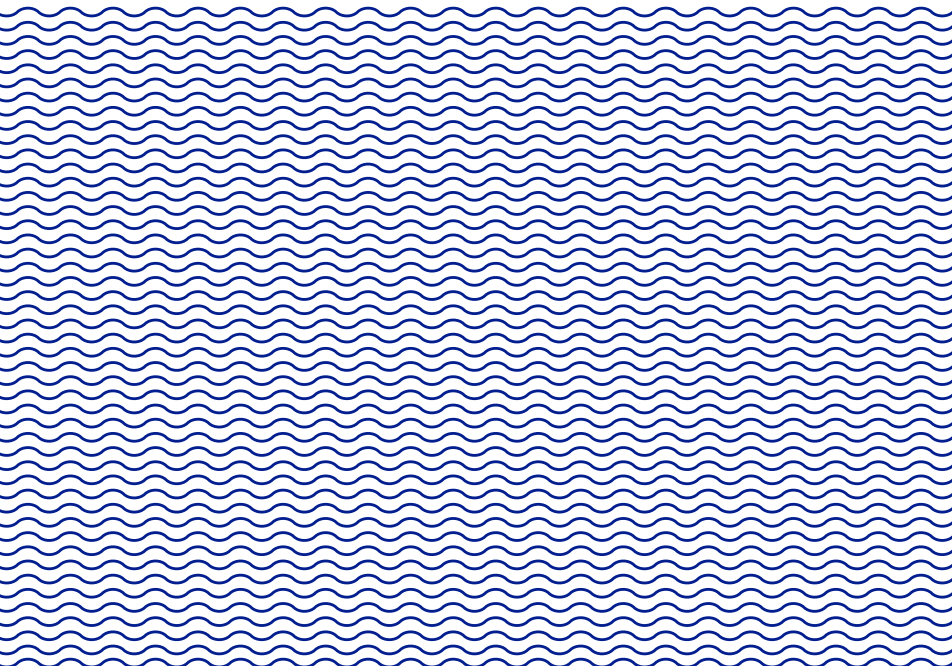
Through our visitation to diverse destinations, our wide stakeholdership and exposure to the best and worst practices across so many subject areas, we are able to use the event as a catalyst to share and encourage best practice.

Our tactics

We aim to leave a lasting and positive impression through the way we conduct our sustainable event operations - with our host cities, delivery partners, event service suppliers and the local event and tourism sector.

We actively seek opportunities to share our experience and leave lasting knowledge legacies.

We hosted workshops, offered guidance and tools, and worked closely with the event production team to support their ability to produce our Race Villages as sustainably as possible and to use the event for good.



Influencing Host Cities

Our focus on reducing single-use plastic at our Race Villages had a positive effect on almost all of our Host Cities.

Alicante embraced the reusable water bottle and refill station idea, had reusable beer cups and it was the first time compostable waste collection had been done at this event.

Lisbon resource recovery efforts at the Race Village were drastically improved on the last edition, to include the addition of food waste collection for composting and salvage of branding for repurposing.

Cape Town provided drinking water through the purification of previously non-potable water allowing water refills to be offered, getting off plastic bottled water, all thanks to our partner Bluewater. Our delivery partner WorldSport committed to sustainable event management at all future events, using our stopover as a benchmark.

In **Hong Kong** we had reusable beer cup and serveware systems. Whilst these services are available in the city, very few events of our kind use them. We were able to be a proving ground for these reusable cup and serveware systems.

In Hong Kong we also were able to show that a single bin and landfill skip waste system is not necessary. We contracted with each materials handler to accept our collected materials for recycling or composting.

In Hong Kong we held a Sustainable Event Workshop where we discussed challenges to best practice in Hong Kong with event industry stakeholders. We hosted a walk around our event site to share how we had managed to operate our plastic avoidance and resource recovery systems including onsite back of house waste segregation.

“I believe the sustainability in huge events like this has a significant role with visitors. The Itajaí Stopover, with the simple action to remove single use plastic cups and change for re-usable ones, had a impressive impact on local population. We start to see small, but important, changes in local community.”

Darlan Huassen Martins, Stopover Director, Itajaí.

In **Guangzhou** public catering was completely plastic free. There were impressive efforts on behalf of our stopover partners Nansha Marina, including returnable food warmer bags. The public exhibition included strict protocols against single-use plastic giveaways, shopping bags etc, all successfully executed.

Auckland added a focus on film plastic collection, something that had not been done by events there before or by our delivery partner.

Itajaí introduced a hugely successful reusable beer cup system, something that had not been done before in events in the city.

Our **Cardiff** delivery partner, Cardiff Harbour Authority and the city's events team were eager to embrace the Race's sustainable event production practices. Over the lead up to the event, a series of changes to the usual event production practices were explored and formally adopted in anticipation of our stopover in Cardiff.

This included establishing a new vendor for compostable serveware and additional waste segregation streams for events. Compostable waste was not an area previously segregated at events produced by the city. Requiring compostable serveware and introducing a compost waste stream was introduced for the first time at our stopover.

Film plastic was also collected separately. See upcoming pages for more information on waste management and resource recovery.

Newport and **Gothenburg** continued with their already excellent sustainable event practices!

The Hague had a terrific branding programme donating flags as souvenirs rather than sending them for destruction.



Photo: Pedro Martínez/Volvo Ocean Race

Single-use Plastic Guide for Events

During the stopover, on World Environment Day, theRace launched a new guide: **Turn the Tide on Plastic at Sporting Events**.

This guide is freely available and hopes to inspire other events to reduce their own plastic footprint. [Download the guide.](#)



Sustainable Event Management Protocols

Where existing protocols were in place, and our local resources allowed, we were able to adhere to certifications and local protocols.

In **Lisbon** and Newport we were independently assessed by Sailors for the Sea against their green regatta protocols.

In **Gothenburg**, the Race Village was successful in achieving the Swedish Environmental Database certification for events.

As mentioned earlier in the report, the Race has implemented a sustainable event management system, self-assessed to be adhering to the requirements of **ISO 20121**.

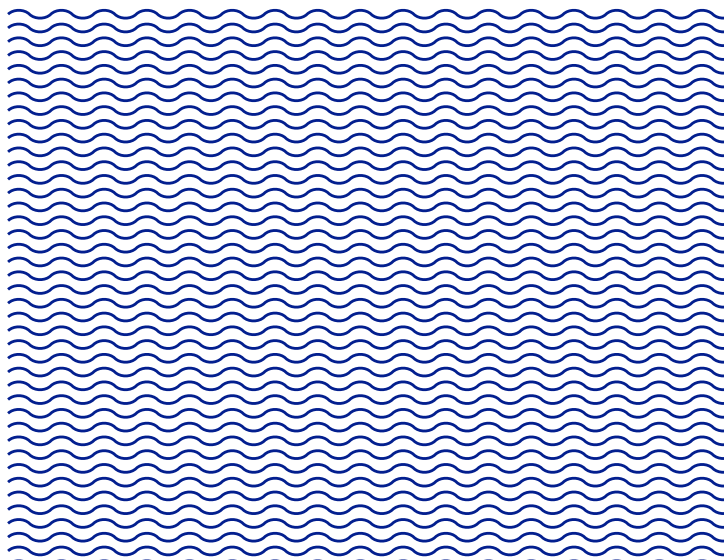
We will plan for independent assessment of our ISO 20121 event sustainability management system in future years.

“I just wanted to say thank you for everything you’ve taught me. You have changed my observations and how I think; seriously. Events can be so damaging but I have learnt so much from the sustainability promise and environmental focus you and the team have taught me and I thank you for opening up my eyes.”

Event production team member, Auckland.



Photo: Jesús Renedo/Volvo Ocean Race



Industry and sector outreach

During the course of the Race and at various stopovers, we participated in or hosted various workshops and conferences with themes on Ocean Health, plastic pollution and sustainability.

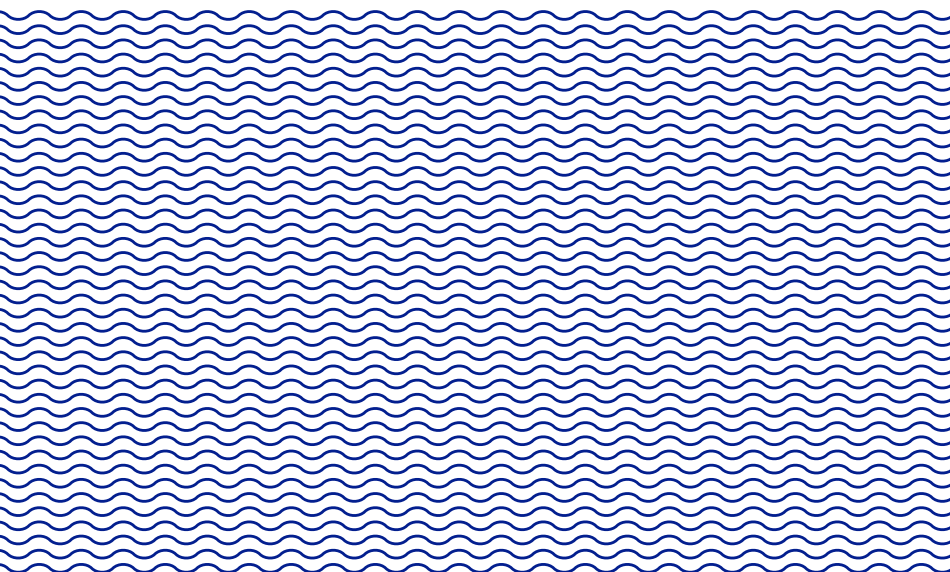
The United Nations held the Regional Ocean Governance conference at our **Cape Town** stopover. Also held were TedX Salon presentations

over three nights in the Globe. CoCreate (Dutch Government) brought young Dutch and South African designers together in a design challenge using recycled materials.

In Hong Kong we held a Sustainable Event Management seminar, to explore the issues of single-use plastic at events.



Photo: Jesús Renedo/Volvo Ocean Race



In **Guangzhou** the issue of marine plastic pollution in China was the focus of a seminar, hosted by United Nations Environment. This was attended by advocates and scientists working within the field, including the China Council for International Cooperation on Environment and Development (CCICED), and the China Institute of Environmental Science.

In **Auckland** we gathered ocean advocates across government, business, NGOs and science to discuss Ocean Health issues for the region.

In **Itajaí** a conference on Ocean Health and plastic pollution was held at our Race Village in association with the municipality.

In Itajaí also The Creative Race was held by Volvo Penta where they brought young creatives together to design an Ocean Health focussed campaign for the brand.

In **Newport**, in partnership with 11th Hour Racing, we hosted a workshop on Circular Economy as it relates to the marine and boat building sector.

In **Cardiff** we presented at the Sustaining Wales conference. The Bay Eco Lounge venue inside the Race Village hosted Keep Wales Tidy's 30th Anniversary of the Blue Flag awards scheme and the launch of the Blue Flag for Private Boat Owners and the Minister for Tourism presented a flag to the first boat owner in Wales.

In **Gothenburg** our Race Village was the destination for a series of workshops on Smart Cities and Circular Economy.

In **The Hague** we hosted a science workshop bringing together science, academia and industry to discuss harmonising microplastic data collection and looking to the future for research on nano-plastics and the effect on human health.



Photo: Pedro Martínez/Volvo Ocean Race

Building on our success

Bringing together a group of sustainability experts, a dedicated Race family and an army of enthusiastic volunteers we have been able to work, alongside our partners, to deliver the ultimate, global series of sailing events that have made a real impact as we strive to restore Ocean health.

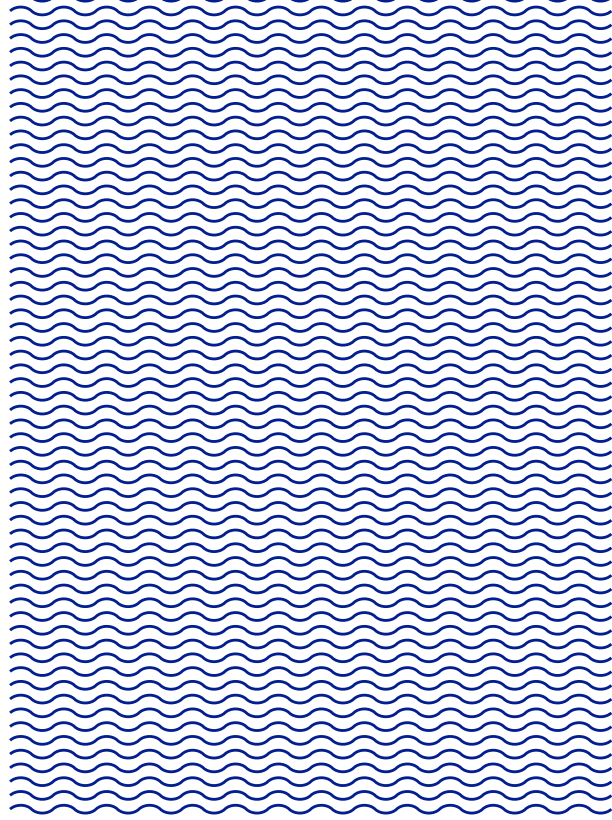
This exciting collaboration enabled us to collectively influence millions of people's understanding of the urgent need to take practical steps to tackle this critical issue. Our message stretched far beyond our Race Villages, touching Governments, businesses and individuals in the process.

As we look toward the next edition of the Race, we remain committed to building on the crucial legacy of this world-class sporting competition to deliver a successful programme with a powerful sustainability message at its heart.





Photo: Ainhoa Sánchez/Volvo Ocean Race



Case Studies

The Sustainability Programme during the 2017-18 Race was extensive, covering three pillars - impact, footprint and legacy. And with twelve host cities, seven race teams, a huge variety of partners, suppliers and millions of people to engage, our review of our overall sustainability performance, impact and learnings could be endless.

This sustainability report showcases examples from our focus areas, covering all of our host cities and various programmes and projects. We can't describe everything we did during this nine-month event, however we have expanded our report through developing the following case studies.

These case studies describe in more detail various elements of the programme, our successes and lessons learned.

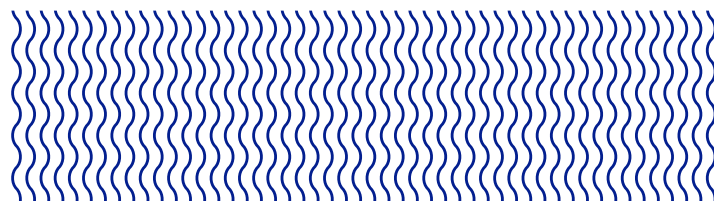
Upcoming in the appendix is our review on our performance against the objectives and targets set.

We hope you enjoy reading about our sustainability journey as much as we had in implementing it.

These case studies along with our detailed management reports set us up for improved results, innovation and leadership in our Sustainability Programme for future editions of the Race.



Photo: James Blake/Volvo Ocean Race



Clean seas campaign and commitments

Case Study



Photo: Sander van der Borch

The Race adopted the United Nations Environment Clean Seas campaign as our foundation call to action to help turn the tide on plastic.

Our campaign included:

- a mission-based race team
- branding across highly visible race assets including all race boats and many Race Village components
- logo inclusion on staff and sailors' uniforms
- The Globe (installation & video onsite)
- calls for individuals, groups, companies and governments to sign up to Clean Seas 'make the pledge'
- exposure across all communications platforms
- video and social media content
- website exposure

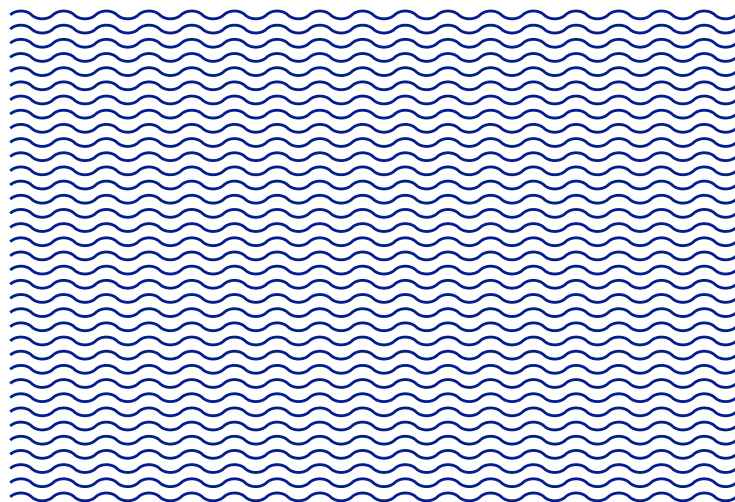
Aligning the UN Environment Clean Seas campaign with the Race through our Sustainability Programme has given additional legitimacy both to our efforts and has linked the issues around plastic pollution to the wider advocacy role of UN Environment.

UN Environment was also a grantee of 11th Hour Racing, facilitating their engagement in the Race.

A vital part of the campaign and media strategy was to provide solutions to the plastic crisis affecting our seas.

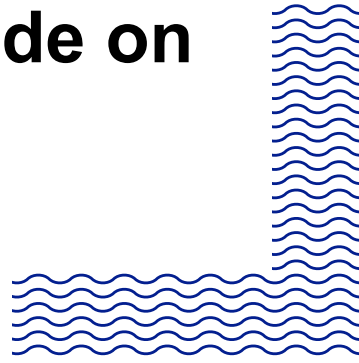
The #CleanSeas pledge platform allowed the Race to offer our supporters and visitors a mechanism to take steps in their own lives to address their use of single-use plastics.

Furthermore, our call to arms was directed to all businesses, groups and governments we met as we raced around the world.



Turn the Tide on Plastic

Race Team



An integral part of our Clean Seas campaign was the inclusion of a mission-based race team - Turn the Tide on Plastic.

British sailor Dee Caffari, the first woman to have sailed single-handed and non-stop around the world in both directions, entered a multinational squad into this edition of the race - some of whom had previously spent very little time racing offshore.

But what they lacked in experience they certainly made up for in passion. Turn the Tide on Plastic weren't just out to win the race, they were also carrying a critical sustainability message about Ocean Health. [Watch the video.](#)

The team's guiding mission was to make as much noise as they could about the United Nations Environment's #CleanSeas campaign so that individuals, businesses and governments would think twice about their relationship with single-use plastics and the devastating impact it is having on the marine environment.

The boat also acted as a floating science laboratory with boat captain/superhero Liz Wardley acting as chief scientist and collecting data that would help scientists understand the threats facing our seas, including groundbreaking information on the global spread of microplastics.





Photo: Ainhoa Sánchez/Volvo Ocean Race

Alongside the important environmental focus, messages around inclusivity in age and gender were also strong themes of their campaign.

The crew acted as ambassadors for the ocean at stopovers spreading the word to the world's media and joining beach cleans to illustrate how much plastic, some of it nearly invisible to the eye, was washing up on the shores of the countries they visited.

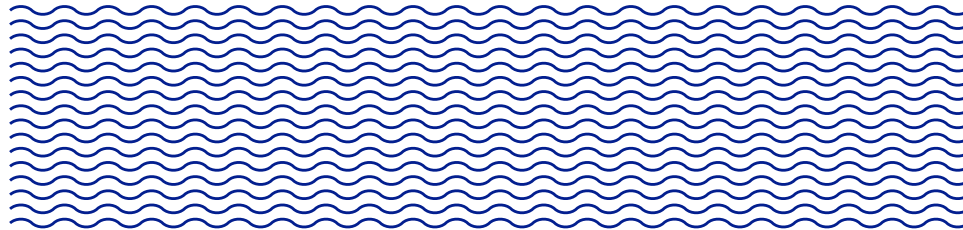




Photo: Sander van der Borch

With grit and determination to make an impact on land as well as in the race, skipper Dee shared her experiences of the harsh reality of ocean plastic pollution and the solutions to it at all seven Ocean Summits.

The crew took the campaign, backed by the principle sustainability partner the Mirpuri Foundation, to heart and, along with their shore crew, pledged to make changes in their own lives to reduce their plastic footprint.

See more about Mirpuri's commitment and support of the team:

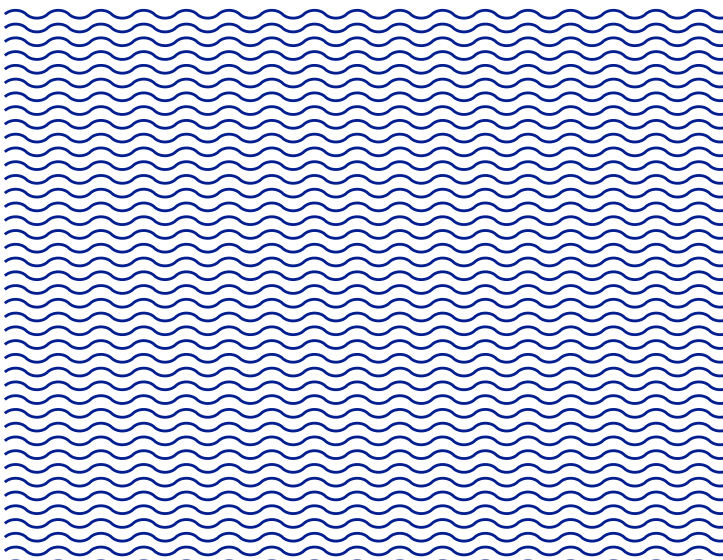


Photo: Ainhoa Sánchez/Volvo Ocean Race

These aims were given a boost through the support of Sky Ocean Rescue, enabling them to spread their message to an even wider audience. [Read the story.](#)

The team base gave thousands of visitors the opportunity to find out more about the vision of the team and learn about the steps they were taking to make a real difference.

They ended up finishing a respectable sixth in the race itself, but their achievements to tackle the ocean plastic crisis will prove to have a lasting legacy.

Hear about plastic in the sailor's own words:

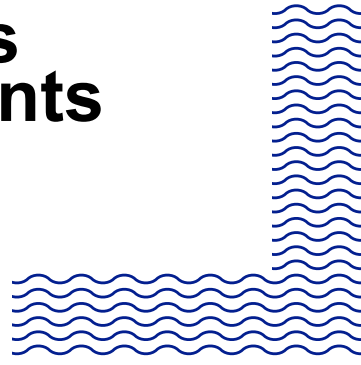




Photo: Ainhoa Sánchez/Volvo Ocean Race

To offer campaign and message exposure, we printed the **#CleanSeas** and **#TurnTheTideOnPlastic** hashtags on the booms of all boats. This considerably expanded the message exposure, as it was potentially in view in most racing footage and photographs.

Clean Seas commitments

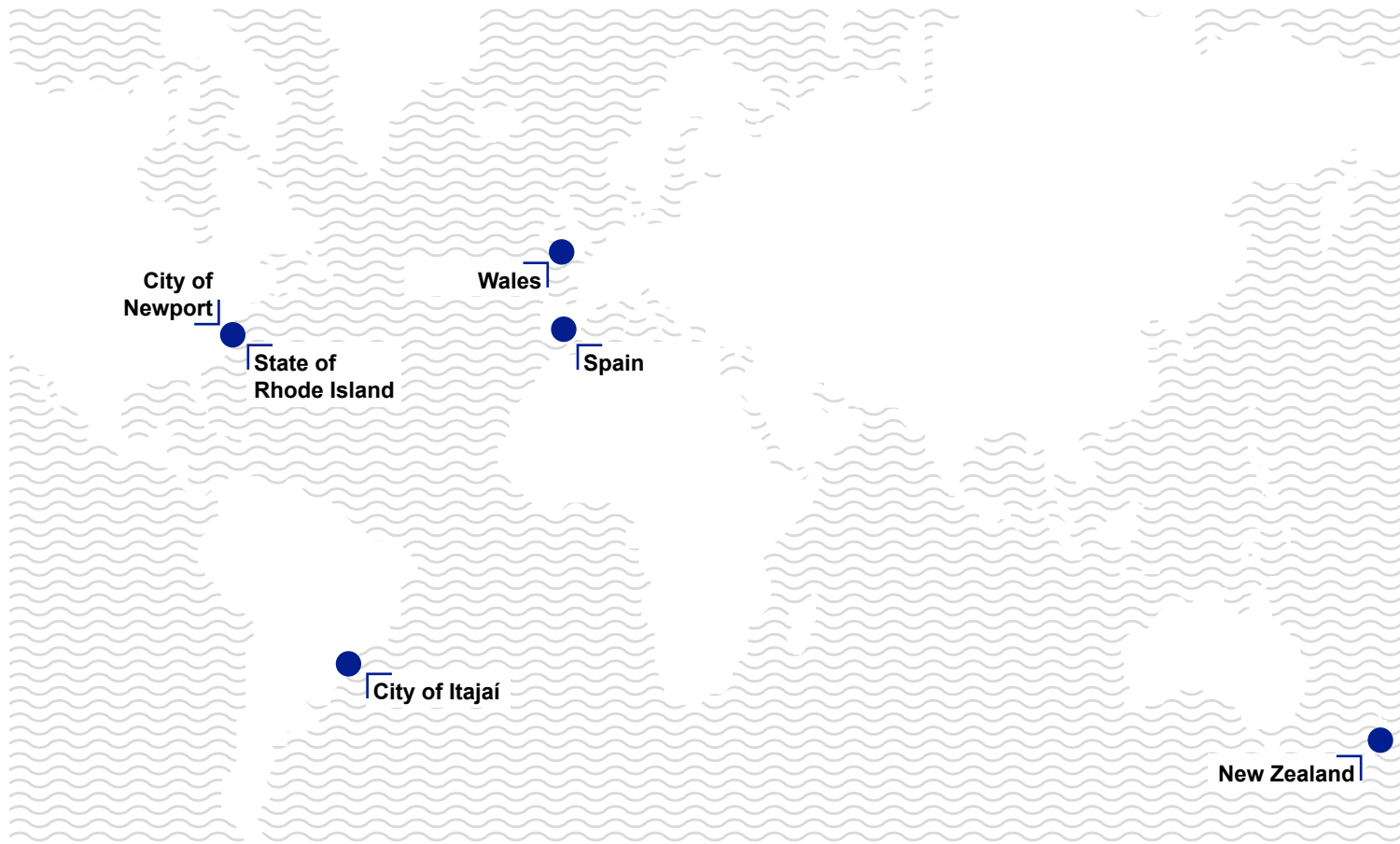


We encouraged governments, companies, groups, NGOs and individuals to 'sign up' to Clean Seas and commit to taking action to reduce their plastic footprint and to help prevent plastic pollution. This was done through our advocacy in the Race Village, at our Ocean Summits, and through all our communications with stakeholders.

Throughout the Race, in collaboration with UN Environment and using our Ocean Summits as announcement platforms, we sought formal commitments and declarations of action by our host cities, states and countries that we visited, along with our partners and wider stakeholdership.



Photo: Jesús Renedo/Volvo Ocean Race

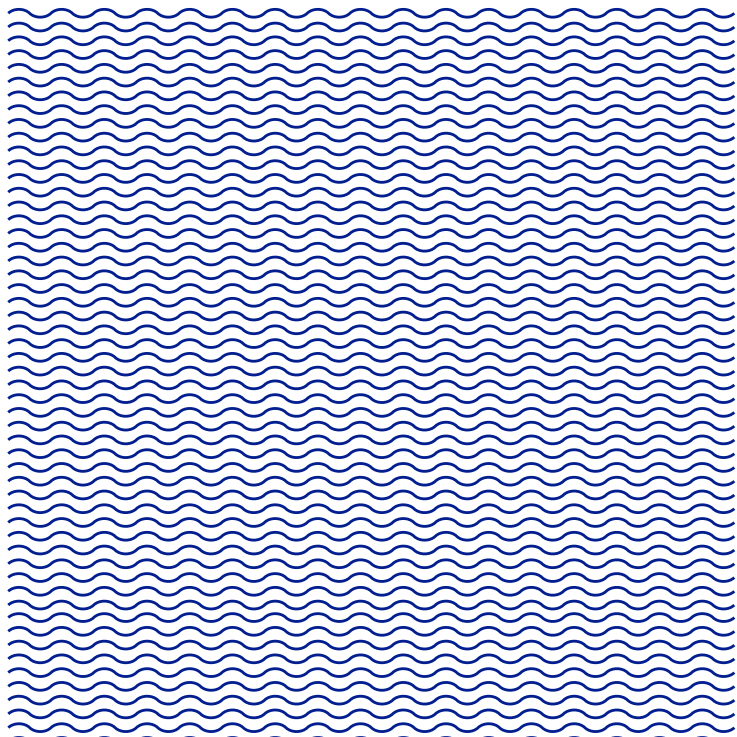


We are incredibly happy with the level of commitment shown. Here are some of the highlights:

At the Ocean Summit, the former Mayor of **Alicante** Gabriel Echávarri, stated that he will make sure that no event he attends in an official capacity will serve water in disposable plastic bottles, and that he will actively encourage the inclusion of sustainability education in schools in Alicante.

20,000

people signed the Clean Seas pledge through our campaign. Our hosts **New Zealand, Spain, Wales, State of Rhode Island, City of Itajaí and City of Newport** all made Clean Seas commitments



In **Hong Kong** we had a school make a commitment!

Also in time for our first Ocean Summit in **Alicante**, and in coordination with UN Environment, we were successful in getting the Spanish government to sign up to the Clean Seas programme.

During the **Auckland** stopover, New Zealand Government became the 42nd country to officially partner with Clean Seas. This was celebrated at an event hosted in the Volvo Pavilion, with key Ocean Health and plastic pollution organisations, campaigns and other stakeholders.

[Read more](#) | [View the news](#).



Paulo Mirpuri (centre), and Hi Fly staff sign to Clean Seas, with Volvo Ocean Race's co-President Johan Salen.

Photo: Jesús Renedo/Volvo Ocean Race



Itajaí city council's environmental secretary Victor Silvestre (L), Mayor of Itajaí Volnei Moratoni and Head Campaigner from UN Environment Clean Seas Brasil Fernanda Altoé Daltro (R).

Photo: Marcos Porto/Itajaí City Hall



Photo: Marcos Porto/Itajaí City Hall

At the Auckland stopover too, airline **HiFly**, also officially signed to Clean Seas and committed to eliminate the use of avoidable and single-use plastics on their aircraft and in their offices before the end of 2019. HiFly is owned by the same group as the not-for-profit **Mirpuri Foundation**. [View the news.](#)

In a first for Brazil and South America, the port city of Itajaí signed up to the United Nations Environment Clean Seas campaign, at an event in the Race Village.

Volnei Moratoni, the **Mayor of Itajaí**, in the state of Santa Catarina, signed up to the ambitious campaign, and laid out his determination to tackle the crisis affecting our seas. The mayor was inspired to sign up to the campaign after visiting New Zealand during the the Race's stopover. [Watch the video.](#)

Government commitments include working on new laws and regulations to tackle plastic pollution, informing citizens about the issue, encouraging the private sector to change, and formally partnering with UN Environment on the issue.

The signing was at the Future of the Oceans seminar held at the Itajaí Race Village during the stopover. Organised by FAMAI, the city's environmental department, the event had 400 guests. Speakers included Mirpuri Foundation's Silvia Mirpuri who presented about the effects of plastic pollution on human health. [Read the news.](#)



Photo: Jesús Renedo/Volvo Ocean Race

At our Ocean Summit in Cardiff, the Welsh Government signed the country up to the United Nations Environment's #CleanSeas campaign.

“2018 is Wales’ Year of the Sea and it’s great to be able to sign up to the Clean Seas campaign, which is an important initiative to tackle the issue of plastic litter in our seas.”

Hannah Blythyn,
Welsh Minister for Environment.



Charlie Enright, Skipper of Vestas 11th Hour Racing, joins Janet Coit, representing the state of Rhode Island, to sign up to the UNE CleanSeas campaign.

Photo: Jesús Renedo/Volvo Ocean Race

At the **Newport** Ocean Summit we saw the government of Rhode Island sign their state as the first in the US to partner with Clean Seas. [Read the news.](#)



Photo: Ainhoa Sánchez/Volvo Ocean Race

Mayor Harry Winthrop (left) signed the Clean Seas pledge alongside Dave McLaughlin, co-chair of One Ocean Exploration Zone, and Executive Director of local advocacy group in **Newport**, Clean Ocean Access.

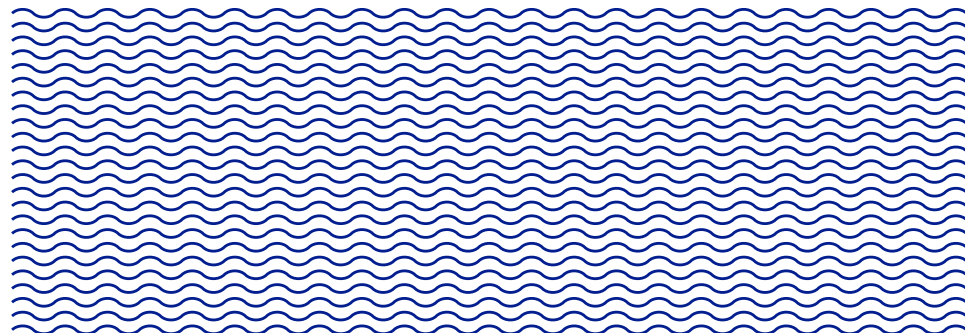




Photo: Jesús Renedo/Volvo Ocean Race

World Sailing and the International Olympic Committee used the Ocean Summit in **Cardiff** and World Environment Day (June 5, 2018) to announce their partnership.

World Sailing signed a memorandum of understanding with UN Environment which will see the two organisations work together to ensure the sport of sailing maintains its commitment to reducing its environmental impact whilst supporting the UN's Sustainable Development Goals.

Also, World Sailing partnered with the International Olympic Committee (IOC) and made a pledge to the UN Environment's Clean Seas campaign.



Photo: Volvo Car Corporation

During the Ocean Summit in Gothenburg Volvo Cars signed-up to Clean Seas, including a commitment to eradicate the use of single-use plastic from all its premises and events by the end of 2019.

[Watch this video](#) to learn more about Volvo Cars' single-use plastic commitment.

During the Ocean Summit in Gothenburg Volvo Cars took the opportunity to unveil its commitments to integrating recycled plastic into the manufacture of its cars.

Beginning in 2025 at least 25% of the plastic used in every new Volvo will be made from recycled material.

To illustrate this commitment, Volvo created a specially built version of the XC60 T8 plug-in hybrid that looks identical to the existing model, but has had several of its plastic components replaced with equivalents containing recycled plastic materials.

Find out more about the car in this [video](#).



Liesbeth van Tongeren (left) signs to Clean Seas on behalf of City of The Hague.

Photo: Pedro Martínez/Volvo Ocean Race

During the Ocean Summit in The Hague more commitments to Clean Seas were sought. **The Province of Zuid Holland**, and the **City of The Hague** both signed up to the UN Environment campaign.

Musto (our Official Supplier of Sailing Apparel and Footwear) were the first private business to join the Clean Seas campaign, making commitments and taking action in their business. Read more about [Musto's commitments and a case study](#) on their reduction efforts.

Our race sponsors **GAC Pindar** (Official Logistics Provider) were also inspired at the Ocean Summit in Alicante to play their part - especially as so much of their business operations takes place on water - sea freight.

They set about encouraging all GAC companies in Europe to take the Clean Seas pledge and have asked all individual employees to do the same. To show staff they meant business, GAC UK provided all staff with a reusable branded bottle to stamp out plastic bottles in the workplace, and reusable coffee cups for colleagues on the road.

GAC's goal was to have all six elements of the company's Clean Seas pledge in place by the time the Race arrived in Cardiff.



Photo: Ainhoa Sánchez/Volvo Ocean Race



Photo: Pedro Martínez/Volvo Ocean Race



Photo: Jesús Renedo/Volvo Ocean Race

All the race teams signed the pledge and **Team Sustainability Charter** and were on stage at the Ocean summit in The Hague to discuss their experience.

Along with those countries, cities and businesses who pledged their commitment, we encouraged visitors to the Race Villages and our website and social media followers to make individual commitments to reduce their plastic footprint.

Onsite we designated Green Team volunteers, wearing 'Take the Clean Seas Pledge – Ask Me How' badges, to engage with visitors, discuss Ocean Health and plastic pollution with them and encourage them to reduce their use of single-use plastic.

iPads were carried by volunteers and iPad kiosks were sited in various locations, including the Turn the Tide on Plastic team base and The Globe, so that people could register their commitment. The Turn the Tide on Plastic team base also featured a photo booth for fun photo opportunities about people's plastic-reduction resolutions.

On our website, social media content, news stories and email signatures we included taglines appealing to viewers and readers to sign the #CleanSeas pledge.

Ocean Summits

Case Study



Photo: Jesús Renedo/Volvo Ocean Race

Over the course of the 2017-18 edition of the Race, a series of Ocean Summits brought together a range of key players from the worlds of sport, industry, government, academia, science and ocean advocacy, to showcase innovative solutions to the global crisis of ocean plastic and to inspire action to help turn the tide on this urgent and most pressing issue.

By convening this mix of advocates in strategic, international locations, the events were planned to inspire and mobilise people, during a decisive moment in history, to develop an action plan to help safeguard the health of our oceans forever.








The events featured regional and national governments, businesses and a range of ocean advocates leading by example, making solid commitments to help stop the ubiquitous spread of plastic in our seas.

Exclusive, groundbreaking data on the amount of microplastics in our Oceans collected by the race's Science Programme was also revealed at the summits.

Ocean Summits were held in seven stopover cities:

-  Alicante - 18 October 2017
-  Cape Town - 7 and 8 December 2017
-  Hong Kong - 22 January 2018
-  Newport - 18 May 2018
-  Cardiff - 5 June
-  Gothenburg - 18 June
-  The Hague - 28 and 29 June 2018

Collectively our Ocean Summits included:

-  225 speakers
-  1827 attendees
-  Three countries' announcements of commitment to to the #CleanSeas campaign
-  The sign-up of Rhode Island, as the first US state, to the #CleanSeas campaign
-  79 government attendees
-  Attendance by 377 businesses
-  Attendance by 148 NGO members

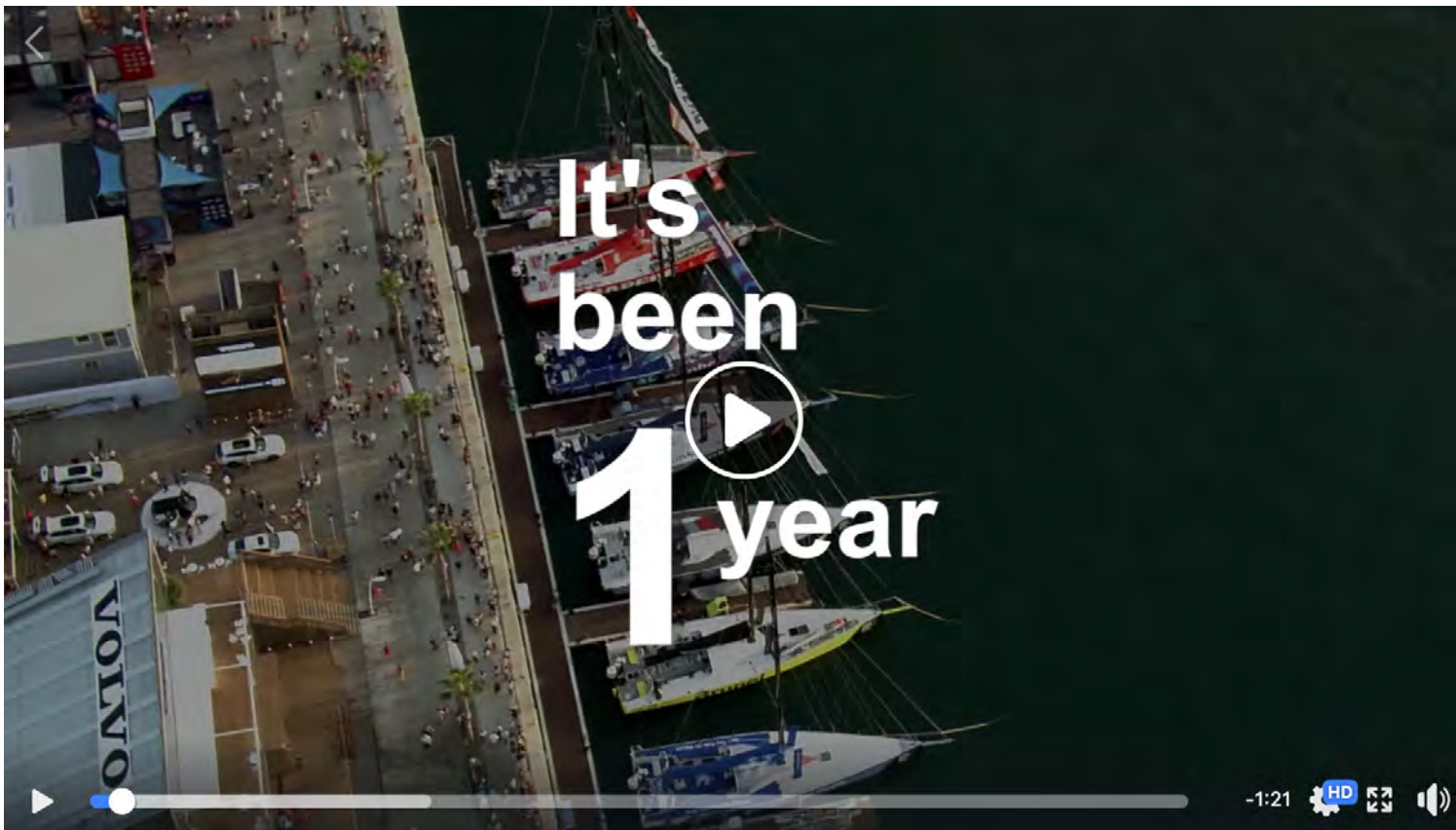




Photo: Jesús Renedo/Volvo Ocean Race

“A global sporting event, with seven teams involved, is in a unique position to offer first-hand evidence of the impact plastic pollution is having on the health of our oceans. I am encouraged that the Race Villages see a combined footfall in excess of three million people over the course of the Race and that the Education Programme is inspiring thousands of children in many countries to embrace a more sustainable future.

These Ocean Summits that bring together the worlds of sport, industry, government, science and ocean advocates, are a vital part of the collaborative steps that are being taken to tackle the ubiquitous pollution of the ocean with plastic debris as well as the broader threats to the Oceans Health.”

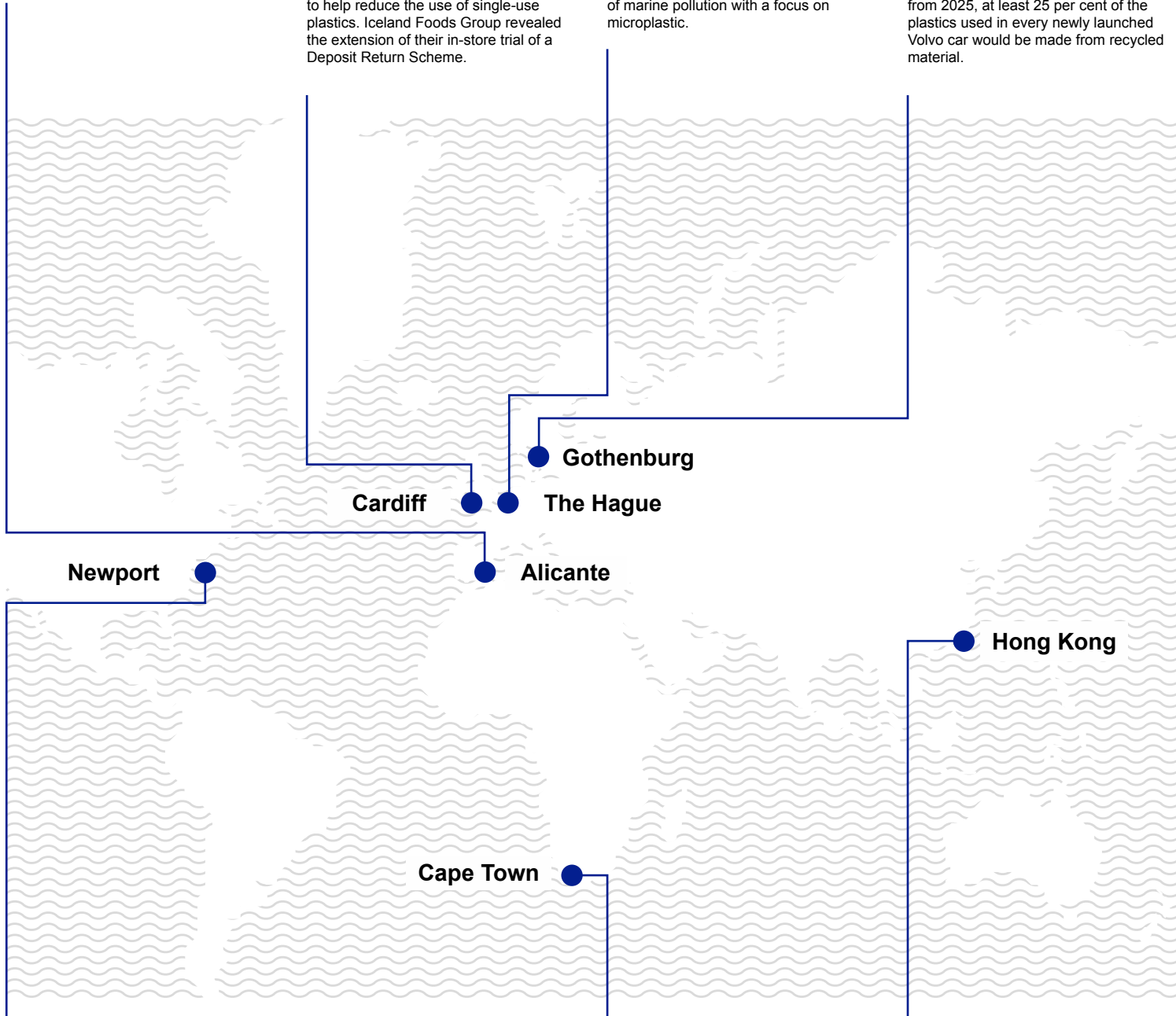
HRH Prince Charles, Prince of Wales.

In **Alicante**, the Spanish Government announced that it was joining the **UN Environment #CleanSeas campaign**. The Mayor of Alicante also announced an education campaign on plastic in all schools in the city.

In **Cardiff**, the Welsh Government signed up to the **#CleanSeas campaign** alongside World Sailing and the International Olympic Committee. The Welsh Government also announced drinking water would be made available along the 870-mile Welsh Coast path to help reduce the use of single-use plastics. Iceland Foods Group revealed the extension of their in-store trial of a Deposit Return Scheme.

In **The Hague**, the city signed up to the **#CleanSeas campaign** and set out a plan to make all plastic products recyclable. World Ocean Council, an ocean industry leadership alliance, revealed the formation of a cross-sectoral business coalition to address land-based sources of marine pollution with a focus on microplastic.

Gothenburg saw the Swedish Government Minister for the Environment, reveal that the Swedish Government has allocated €7.8 million to 15 projects related to Ocean Health. And, to wide recognition, Volvo Cars announced the company's ambition that from 2025, at least 25 per cent of the plastics used in every newly launched Volvo car would be made from recycled material.



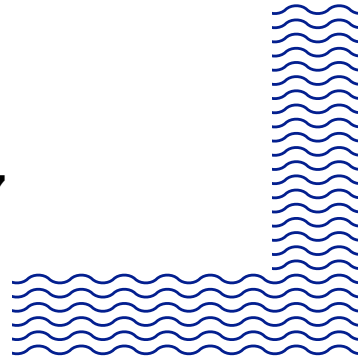
During the **Newport** stopover, Rhode Island become the first US state to sign up to the **#CleanSeas campaign**. Volvo Cars revealed it would remove single-use plastics from all its offices, canteens and events across the globe replacing over 20 million single-use plastic items with sustainable alternatives. They also signed up to the **#CleanSeas campaign**.

At the **Cape Town** Ocean Summit, the V&A Waterfront shopping centre, which welcomes 24 million visitors each year, pledged to eliminate single-use plastic bags and bottles. Event organiser World Sport committed to implementing sustainability practices across all its events.

In **Hong Kong**, Daisy Lo, assistant director of environmental protection, Hong Kong Special Administrative Region (HKSAR) government, pledged to explore ways to reduce plastic at source, revealing plans for a \$HK20 million fund for upgrading plastic recycling facilities.

Alicante

**Volvo Pavilion
18 October 2017**



The first of our Ocean Summits for the 2017-18 Race was held in Alicante.

The speaker list was an impressive combination of Spanish and international representatives across government, business, innovation and advocacy sectors. Our master of ceremonies was, Paul Rose an ardent explorer, television presenter, journalist, author, Vice President of the Royal Geographical Society and an Expedition Leader on the Pristine Seas team.

We were honoured to have Erik Solheim, Executive Director of United Nations Environment speak at our first Ocean Summit in Alicante.

We heard from Pete Ceglinski, co-founder of the [Seabin Project](#), an innovative device to clean marinas. We had two of these Seabin devices touring with us and installed them next to our pontoons.

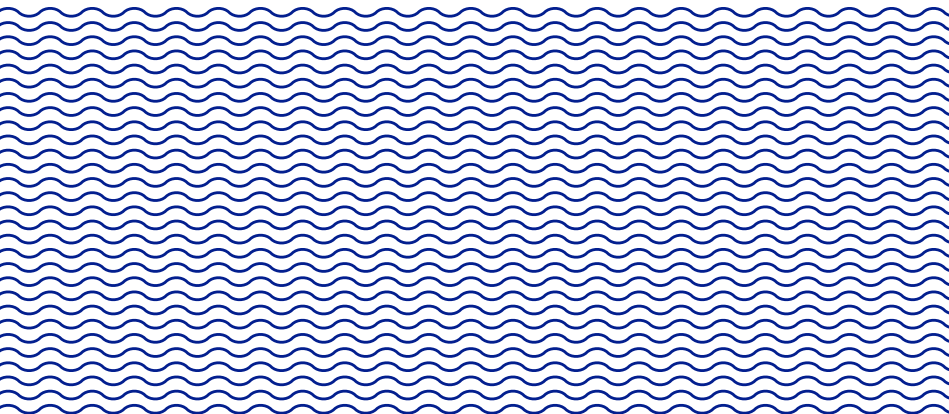
Also speaking in Alicante was Sian Sutherland of [A Plastic Planet](#) who used the occasion to announce their intention to make a plastic-free shopping aisle a reality by the end of the Race. And that came true!

Thomas Kimber of [Karūn](#) introduced their new the Race range of sunglasses made from discarded fishing nets. [Find out more.](#)

Nigel Musto shared the story of the company's journey to significantly reducing their plastic packaging.

[Read the article](#)

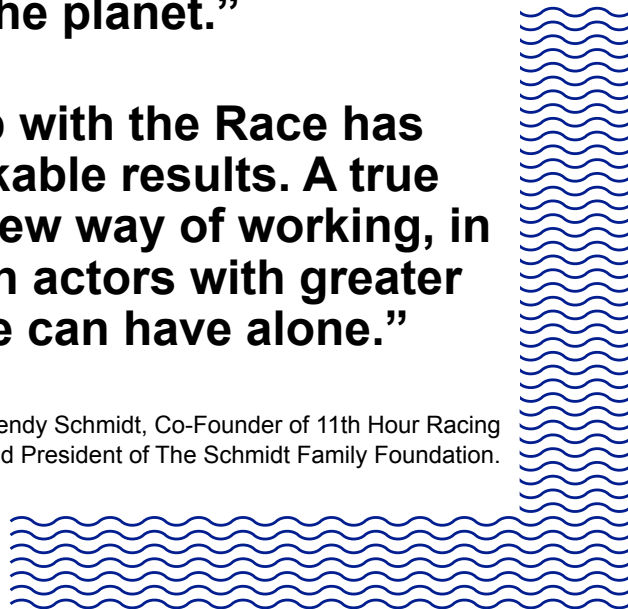
[View the speaker list](#)



“At the moment we’re seeing unprecedented public attention around the world on the issue of throwaway plastics and ocean pollution. Crucially, we’re also seeing more and more governments and companies respond with commitments to the #CleanSeas campaign and positive, concrete action. This is thanks in no small part to the Turn the Tide on Plastics team, who are taking the message and the science across the planet.”

“Our partnership with the Race has produced remarkable results. A true example of the new way of working, in partnerships with actors with greater outreach than we can have alone.”

Wendy Schmidt, Co-Founder of 11th Hour Racing
and President of The Schmidt Family Foundation.



Cape Town

Nedbank Auditorium

7 and 8 December 2017



In Cape Town the Ocean Summit took on a two-day format, with local partners co-presenting the event.

At this Ocean Summit we released our first groundbreaking data on the amount of microplastics detected in European waters. [Read more.](#)

Other highlights included the V&A Waterfront, which welcomes 24 million visitors each year, pledging to eliminate single-use plastic bags and bottles. Our Cape Town delivery partner for the Race, WorldSport, also declared their commitment to sustainable event management at all future events, using our stopover as a benchmark.

Key decision makers and influencers, including WWF's John Duncan and Race skippers Vestas 11th Hour Racing's Charlie Enright and Turn the Tide on Plastic's Dee Caffari all gave their own personal insight on the plastic crisis facing our oceans.

Young entrepreneur Boyan Slat of [The Ocean Cleanup](#) discussed the progress of his innovation to trawl plastic from the Ocean.

We were delighted to hear from Brian Bauer of [Algramo](#) who has an innovative solution for preventing single-use plastic containers and sachets through a bulk refill programme. [Watch the video.](#)

Ian Dommissie presented [Ecobricks](#) which are plastic bottles packed to a set density with used, clean and dry plastic to form building blocks that can be used over and over again. [Watch the video.](#)

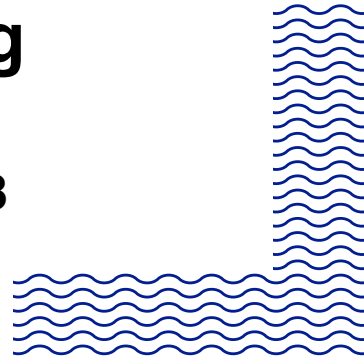
Gregory Player of [Clean C](#) and Chris Whyte of [Use-It](#) spoke about the organisations, which combine resource recovery with community development and sustainable employment.

Richard Hardiman of [RanMarine](#) presented their 'Waste Shark' which is an aqua drone and surface plastic pollution recovery device. Fitted with autopilot and back-to-base function, this is a terrific innovation presented at our Cape Town Ocean Summit.



Hong Kong

Volvo Pavilion
22 January 2018



The Ocean Summit in Hong Kong presented another opportunity to bring local and international speakers and guests together to focus on plastic pollution, this time with a focus on Asian waters.

Daisy Lo, assistant director of environmental protection, Hong Kong Special Administrative Region (HKSAR) government, pledged to explore ways to reduce plastic at source, revealed plans for a \$HK20 million fund for upgrading plastic recycling facilities and talked of Government efforts to clean up the marine environment.

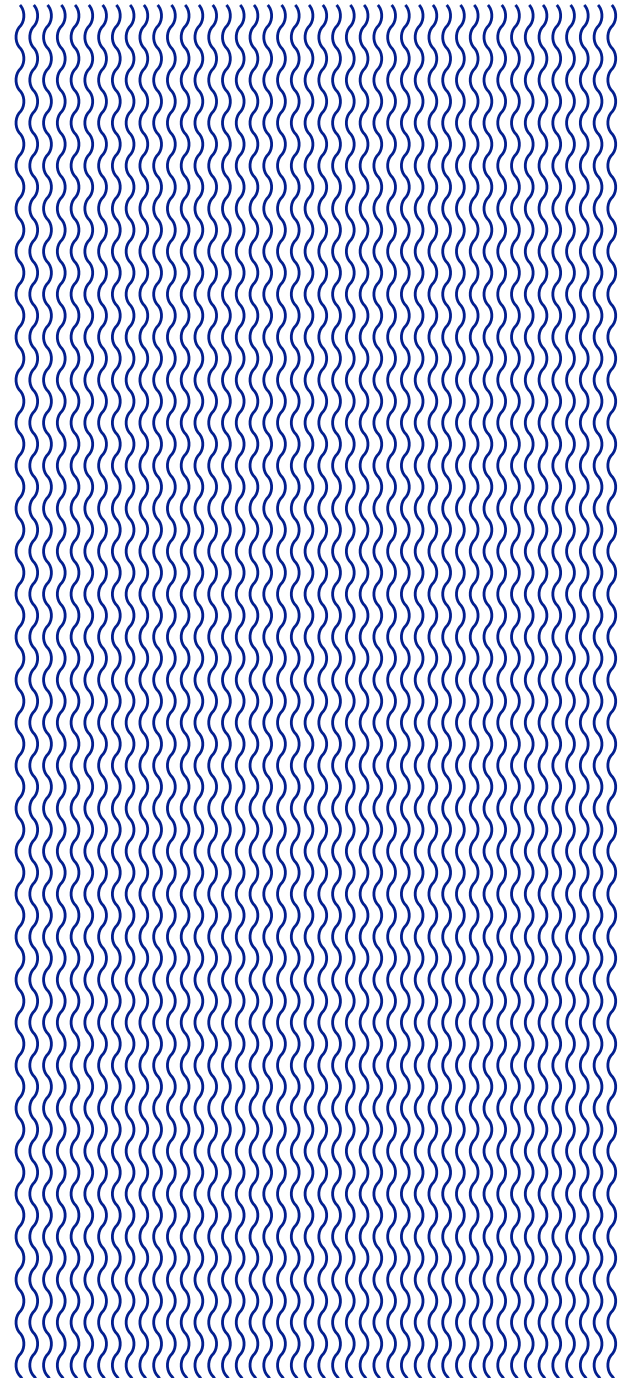
Tiza Mafira of [The Plastic Bag Diet \(Jakarta\)](#) presented the campaign to ban plastic bags in her city.

Safia Qureshi of The Cup Club showcased the reusable coffee cup system currently being innovated in the UK. [Watch the video.](#)

Stiv Wilson of [The Story of Stuff](#) took the audience through examples of innovation and ingenuity being pioneered by communities facing plastic pollution crises.

Some of the local issues relating to plastic pollution and the actions needed to deal with them were presented to the audience by Patrick Yeung from the Oceans Conservation section of [WWF Hong Kong](#).

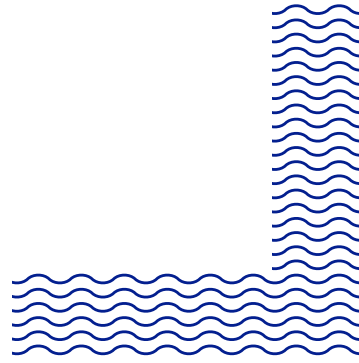
[Watch the behind the scenes video.](#)



Newport

Volvo Pavilion

18 May 2018



During the Newport stopover, Rhode Island became the first US state to sign up to the #CleanSeas campaign.

Volvo Cars revealed it would remove single-use plastics from all its offices, canteens and events across the globe, replacing over 20 million single-use plastic items with sustainable alternatives. They also signed up to the #CleanSeas campaign.

The audience heard that Founding Principal Partner of the Race's Sustainability Programme, 11th Hour Racing, has teamed up with the Race Sustainability Partner, Bluewater to create the Imagine H2O Urban Drinking Water Challenge 2018 to advance and deploy resilient drinking water solutions in fast-growing cities globally.

Other speakers included, Martin Lundstedt, President of AB Volvo and Chief Executive Officer of the Volvo Group and Jason Rolfe, NOAA Marine Debris Program Mid-Atlantic Coordinator who talked about the measures they're taking to raise awareness of the issue.

[See the full speaker agenda](#)

[Read the news story](#)



Photo: Jesús Renedo/Volvo Ocean Race

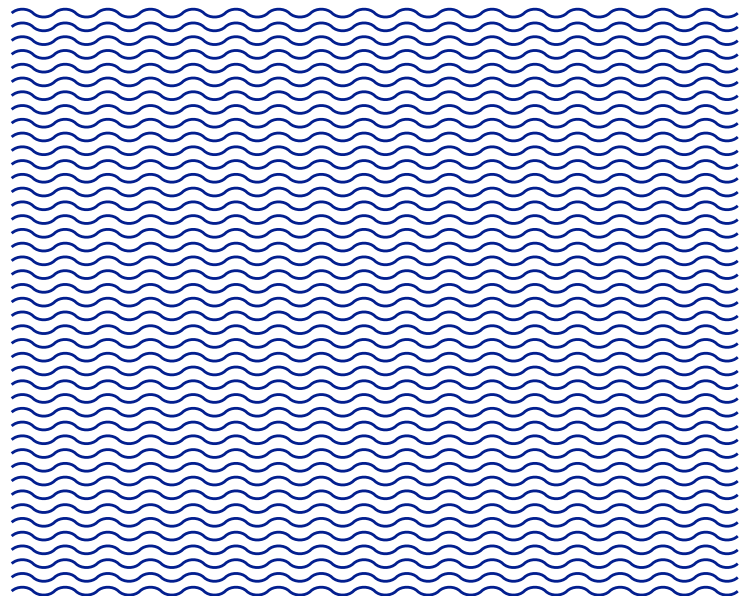




Photo: Jesús Renedo/Volvo Ocean Race

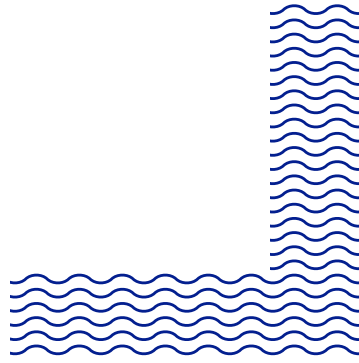
“We are proud that Rhode Island, the Ocean State, is the only North American stopover for the the Race and the first state to sign the CleanSeas campaign to address the scourge of plastic ocean pollution. Rhode Island is working to promote sustainable practices and recognises the connections between what we do on land and the health of our waterways. We will be working with the Rhode Island Marine Trades Association and other partners to reduce marine debris, protect our coastlines, and promote stewardship of our one and only planet.”

Janet Coit, Director of the Rhode Island Department of Environmental Management.

Cardiff

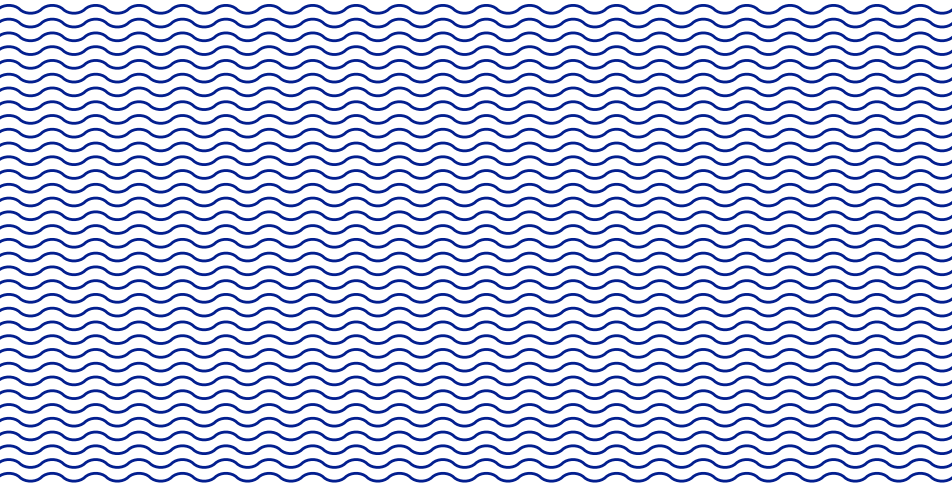
Welsh Pavilion

5 June 2018



At the Ocean Summit in Cardiff, Sky News presenter Sarah-Jane Mee was the master of ceremonies for the half-day event.

In Cardiff, the Welsh Government signed up to the #CleanSeas campaign as did World Sailing and the International Olympic Committee. The Welsh Government also announced drinking water would be made available along the 870-mile Wales Coast path to help reduce the use of single-use plastics.



“These Ocean Summits that bring together the worlds of sport, industry, government, science and ocean advocates, are a vital part of the collaborative steps that are being taken to tackle the ubiquitous pollution of the ocean with plastic debris as well as the broader threats to the Ocean’s Health.”

HRH Prince Charles, Prince of Wales.



Photo: Jesús Renedo/Volvo Ocean Race

In Cardiff, HRH Prince Charles presented a keynote video address describing how the Ocean Summits were a ‘vital part’ of the solution to plastic pollution.

[Read the news](#)

Iceland Foods Group revealed the extension of their in-store trial of a Deposit Return Scheme. The reverse vending machines accept Iceland’s empty plastic beverage bottles and repay customers with a 10p voucher for each recycled bottle, to be used in store.

The event also heard from Frédéric Michel about the importance of innovation in the field and about how Sky Ocean Ventures, a £25m innovation fund, is committed to investing in new ideas to help solve the ocean plastic crisis.

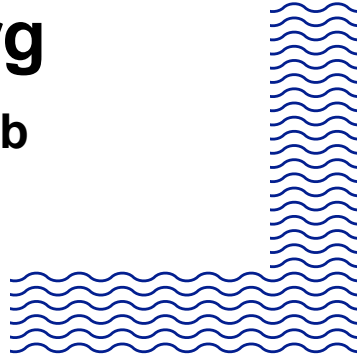
[See the full speaker agenda](#)

[Read the news story](#)

Gothenburg

Ocean Race Club

18 June 2018



The first ever Gothenburg summit, attended by HRH Crown Princess Victoria of Sweden, saw progressive announcements to tackle the plastic crisis from the Swedish Government and Volvo Cars.

Karolina Skog, Swedish Government Minister for the Environment, revealed at the event that the Swedish Government has allocated €7.8 million to 15 projects related to Ocean Health.

Volvo Cars signed-up to Clean Seas, including a commitment to eradicate the use of single-use plastic from all its premises and events by the end of 2019.

[Watch this video](#) to learn more about Volvo Cars' single-use plastic commitment.

During the Ocean Summit in Gothenburg Volvo Cars took the opportunity to unveil its commitments to integrating recycled plastic into the manufacture of its cars.

Beginning in 2025 at least 25% of the plastic used in every new Volvo will be made from recycled material.

To illustrate this commitment, Volvo created a specially built version of the XC60 T8 plug-in hybrid that looks identical to the existing model, but has had several of its plastic components replaced with equivalents containing recycled plastic materials. [Find out more about the car in this video.](#)

Kristofer Sundsgård, Managing Director of Stena Recycling, said that the company has a responsibility to drive innovation and have built a state of the art recycling centre where they can recycle 95% of a car.

[See the full speaker agenda](#)

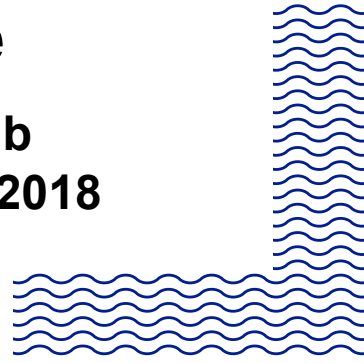
[See the news story](#)



Photo: Jesús Renedo/Volvo Ocean Race

The Hague

Ocean Race Club
28 and 29 June 2018



The final two-day Ocean Summit in The Hague, also saw a range of experts attend a series of workshops including a science session to discuss the latest research on micro and nano plastics and steps needed to advance our understanding of the subject.

Announcements about the future of the Sustainability Programme rounded off the series of successful events and provided a roadmap for the future.

In The Hague, the city signed up to the #CleanSeas campaign and set out a plan to make all plastic products recyclable. World Ocean Council, an ocean industry leadership alliance, revealed the formation of a cross-sectoral business coalition to address land-based sources of marine pollution with a focus on microplastic.

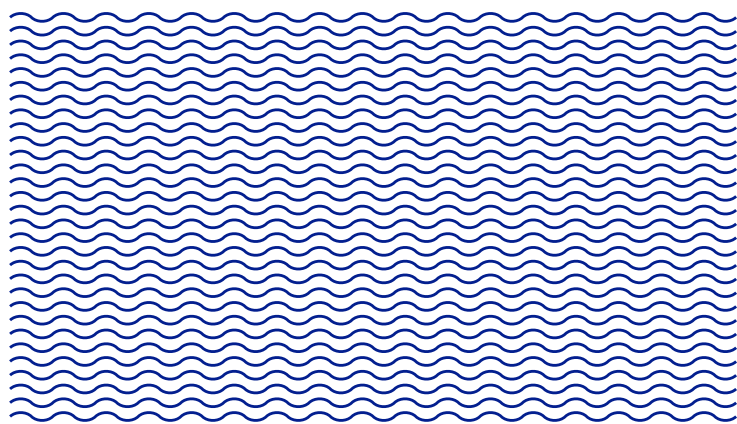
HRH Princess Laurentien Of The Netherlands, director of Fauna and Flora International, spoke about the need to stop plastic pollution.

Giulio Bonazzi, President and CEO of Aquafil, presented their brand Econyl that turns old fishing nets into yarns used for textiles and carpet. Find out more.

Rodrigo Garcia Gonzalez from Skipping Rocks Lab introduced Ooho, an innovative solution to drink water without packaging thanks to an edible wrapping.

Anne Marieke Eveleens, Co-founder of the Great Bubble Barrier explained how the technology they are developing can prevent plastic pollution from entering the ocean. Watch their video to find out more.

Enrique Kahle, founder of DVELAS, described the process they implement to turn old sails into furniture.



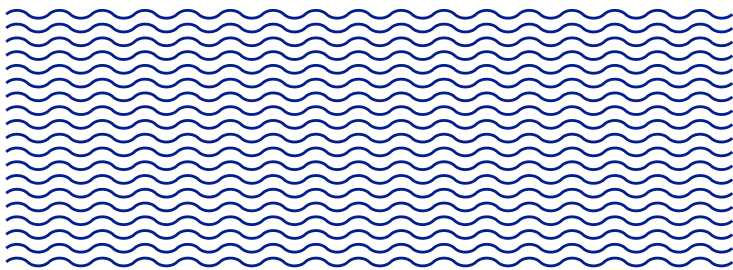
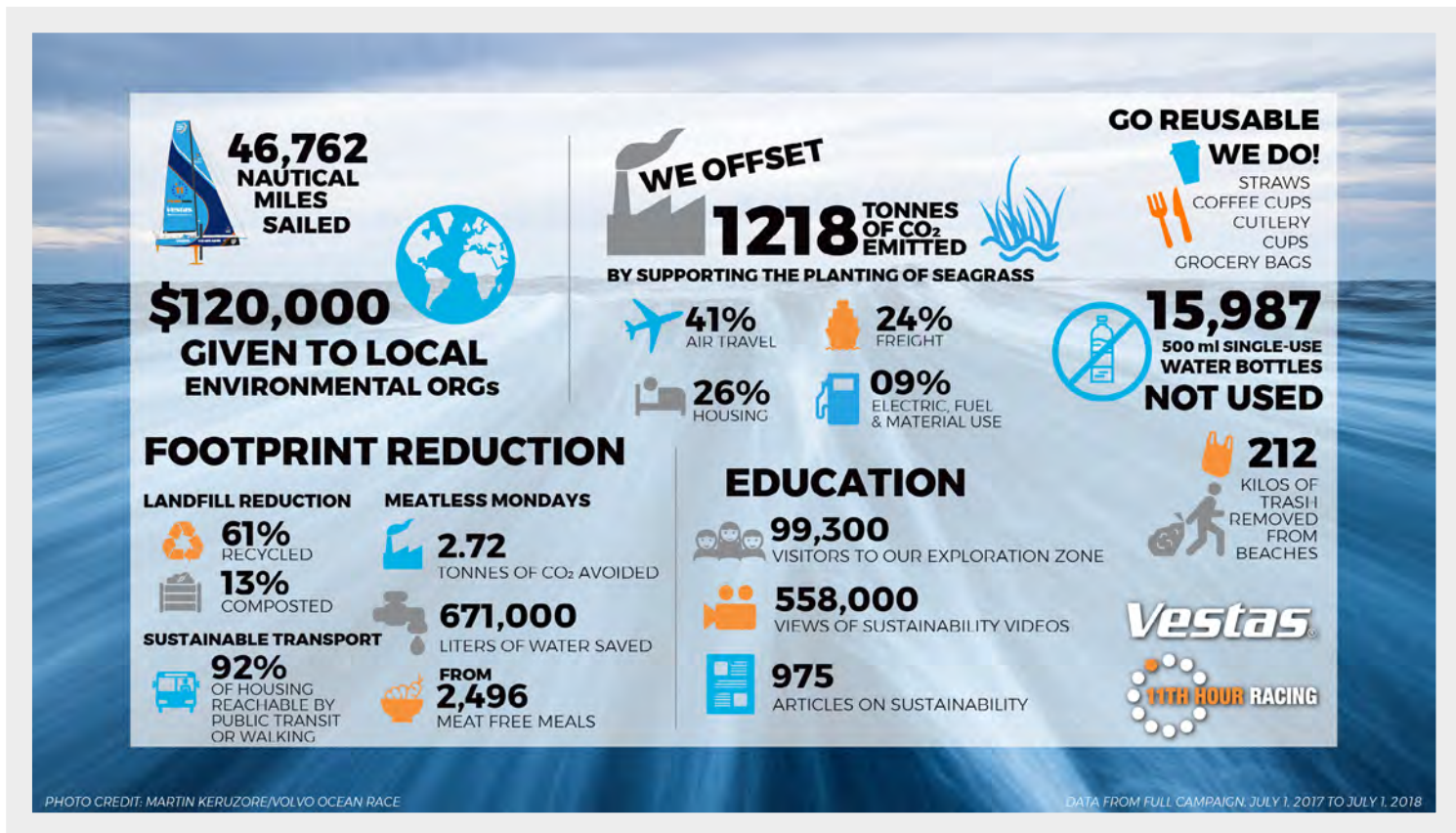
Vestas 11th Hour Racing

Case Study

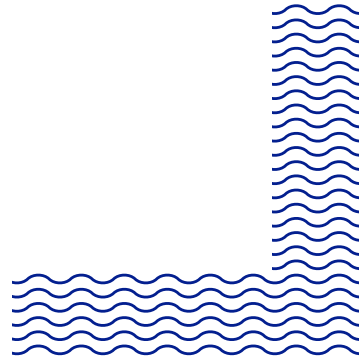


Photo: Sam Greenfield/Volvo Ocean Race

Team Vestas 11th Hour Racing implemented a comprehensive sustainability plan and set a benchmark for teams competing in future races, and for sports teams in general. Their sustainability plan focussed on three elements: Positive Outreach; Sustainable Operations; Environmental Footprint.



Positive outreach



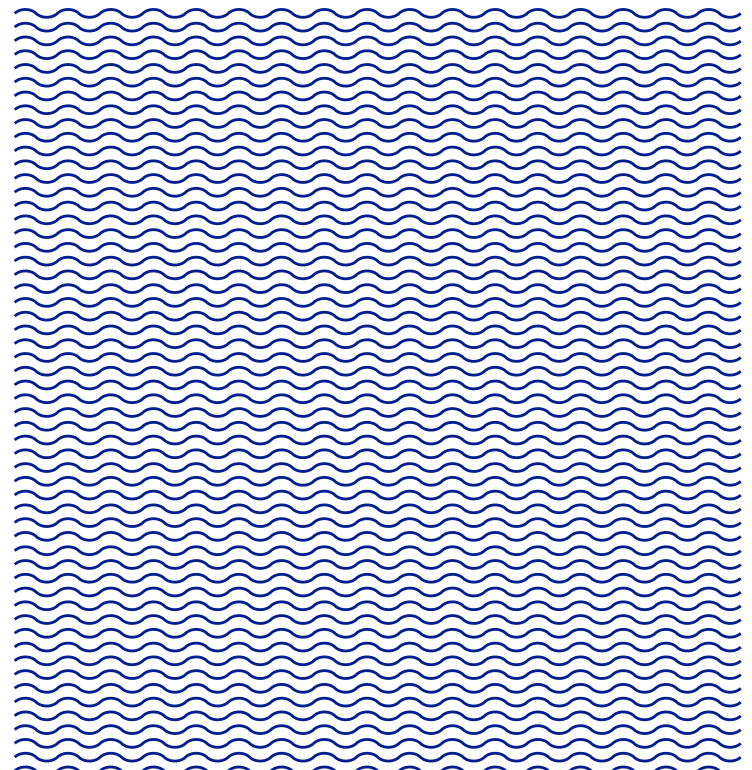
Ocean Health, environmental issues and sustainable solutions were a central focus of the team base's public space. Visitors enjoyed an interactive educational experience in the 'Exploration Zone', learning about ocean research, renewable energy, the principles of circular economy and other sustainable innovations.

The team's onsite efforts were reinforced and extended to a wider audience via sustainability-focussed communication channels.

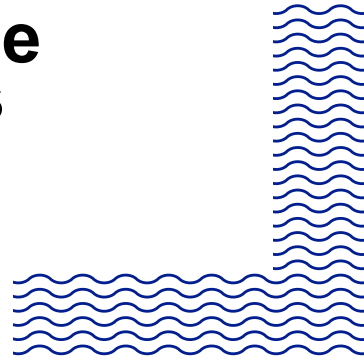
As advocates for Ocean Health and sustainability, team members presented at six of the seven Ocean Summits and at other public engagements with local and international leaders and businesses.

At every stopover the team left a positive legacy through their Legacy Project funded by 11th Hour Racing. This allowed the team to choose a local environment or sustainability focussed organisation for a \$10,000 grant at each stopover location. [Watch this video](#) to learn more about the Cape Town grant recipient.

Refer to the ['Community engagement'](#) case study.



Sustainable operations



To bear out the sustainability message that the team promoted they put into practice a commitment to sustainable operations.

To adhere to best practices the team developed guidance documents;

- their Food Charter outlined a commitment to source local sustainable food;
- the Environmental Purchasing Policy (EPP) provided guidance for the team, and partners and suppliers, to identify responsible purchasing options.

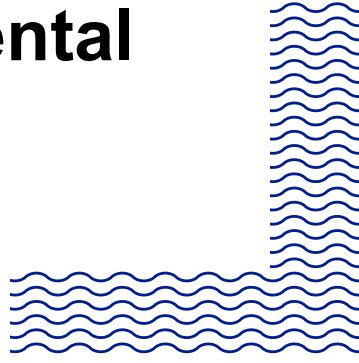
As part of their sustainable operations efforts a reduction of the team's environmental footprint was an overarching objective. To achieve this the team tracked, calculated and reported on their footprints relating to carbon emissions, water and waste.



Their footprint reduction initiatives included:

- ◆ Meatless Mondays.
- ◆ Single-use plastic avoidance.
- ◆ Re-use or rental of equipment and furniture for their team base.
- ◆ Diversion of waste from landfill by commitment onsite to composting and recycling.
- ◆ Planning of accommodation close to race villages to minimise carbon emissions caused by transport.
- ◆ Provision of Bluewater filtration units to supply water at the team base.

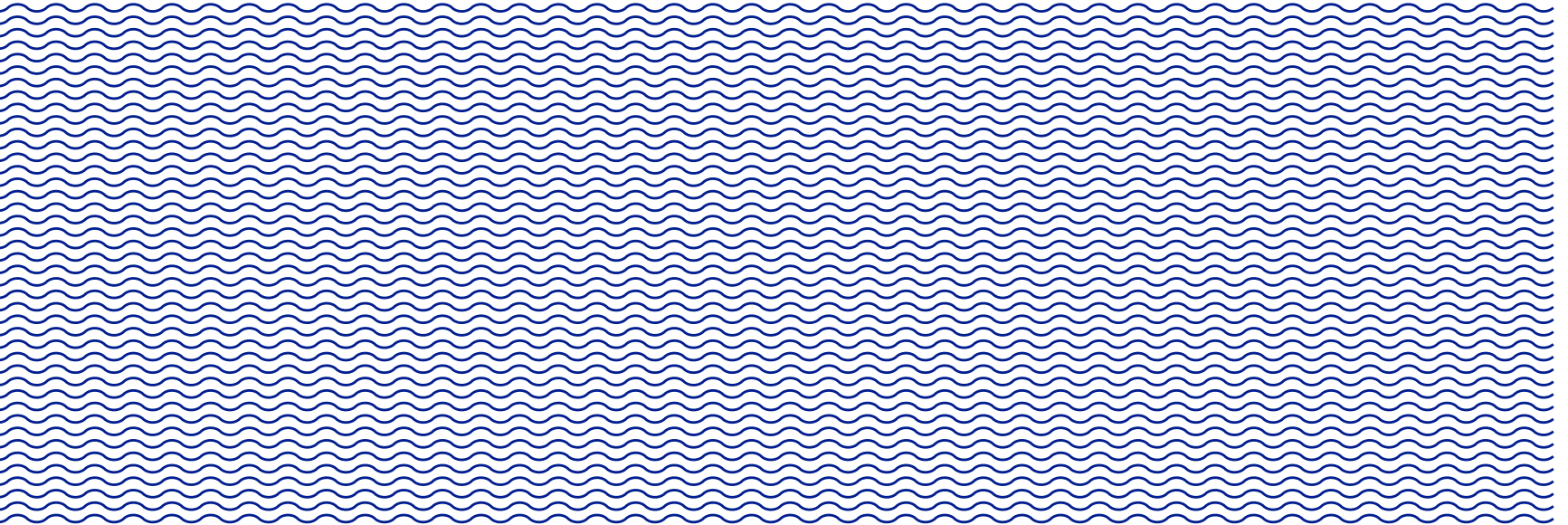
Environmental footprint



A major component of the team's sustainability efforts was to support offset programmes for carbon and waste. The latter was given particular relevance after the unavoidable loss of their rig and sails off South America after the boat was dismantled. To compensate for this and the rest of the team's overall waste footprint a grant was provided for [Healthy Seas](#) in The Netherlands - an environmental initiative that recovers ghost fishing nets and other marine debris and regenerates the material into yarn that can be used for textiles and clothing.

The team's greenhouse gas emissions footprint was compensated for by contributing to a carbon offset programme - [The Ocean Foundation's SeaGrass Grow](#) program. This programme funds seagrass restoration as a means to increase carbon sequestration and restore marine habitats.

Vestas 11th Hour Racing's full sustainability report is available [online](#).





Mirpuri Foundation

Case Study



Photo: Jesús Renedo/Volvo Ocean Race

The Race worked with Principal Sustainability Partner Mirpuri Foundation who gave their invaluable support to develop and amplify the Sustainability Programme, exploring the issues and solutions to the ocean plastic crisis.



Through their sponsorship of the Turn the Tide on Plastic boat, alongside UN Environment, the Portuguese foundation helped promote the #CleanSeas campaign.

Members of the foundation took part in several of the Ocean Summit series of events to showcase their expertise in areas related to human health and plastic pollution and, more broadly, on the topic of Ocean Health.

As a result of their involvement with the Ocean Summits they generated dozens of important contacts, including with UN Environment and the founders of Seabin to explore future ways of working together.

Back in their hometown of Lisbon the foundation used the Race to inspire the next generation of Portuguese sailors through the introduction of a sailing programme at Cascais Naval Club that integrated sport and sustainability. This enabled the kids to link sailing with ocean plastic pollution and the solutions to it in an informative, class-based setting.

Turn the Tide on Plastic's Portuguese sailors Frederico Pinheiro de Melo and Bernardo Freitas also shared their experience of sailing in the race and ocean plastic pollution with the awe-inspired youngsters.

A plastic collecting Seabin was installed within the Cascais marina to remove debris floating on the water and to offer the thousands of people who walked it every day a visual reminder of the amount of plastic polluting our seas.

During the Auckland stopover, Paulo Mirpuri, President of the Mirpuri Foundation, officially signed the UN Environment #Cleanseas pledge, on behalf of airline Hi Fly who are owned by the same group as the not-for-profit foundation.

The Portuguese airline also took unprecedented steps towards improving airborne sustainability by eliminating single-use plastic on their flights. This plastic-free trial included replacing cutlery with compostable bamboo cups and spoons. Salt and pepper shakers, bedding packaging dishes, single-serve butter pots, soda bottles, and tooth brushes were swapped for more sustainable alternatives.



Education Programme

Case Study



Photo: Jesús Renedo/Volvo Ocean Race

Real positive action has been triggered to reduce disposable plastic in schools, communities and homes as a result of our Education Programme.

For the 2017-18 edition, the Sustainability Programme developed an educational outreach programme so children aged 6-12 years could discover the excitement of sailing in the Race, learn about the importance of the ocean, understand how plastic pollution is damaging our seas and be part of the solution.

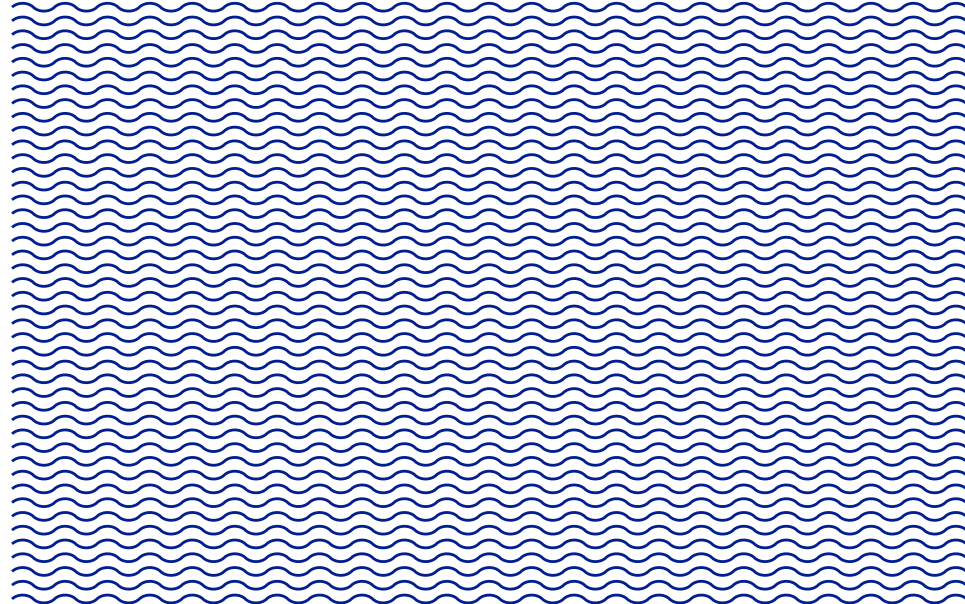
The age-specific topics were not only exciting and informative, they also enabled empowerment by letting children become 'Champions for the Sea' and furthermore, they complemented their in-school learning. They were designed to equip children with the knowledge about the harm plastic can do to sea life and to inspire them to make a personal pledge to reduce their plastic footprint.

The programme covers a range of different subjects including language, geography, history, STEAM, global citizenship and art.

volvoceanrace.com/education

The programme aims to create awe and wonder about the ocean, the Race and our connection to our blue planet so that children will understand how important it is in their lives, why we should value the ocean and why we need to protect it from plastic pollution.

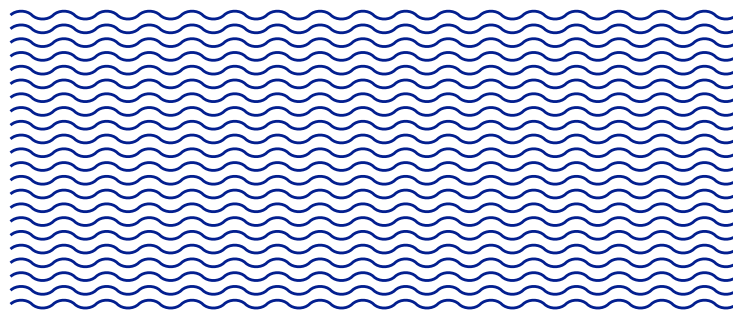
Our online Ocean Health Education Programme, available in seven languages, has almost 95,000 students registered in 40 countries worldwide, from Ghana to Guam!

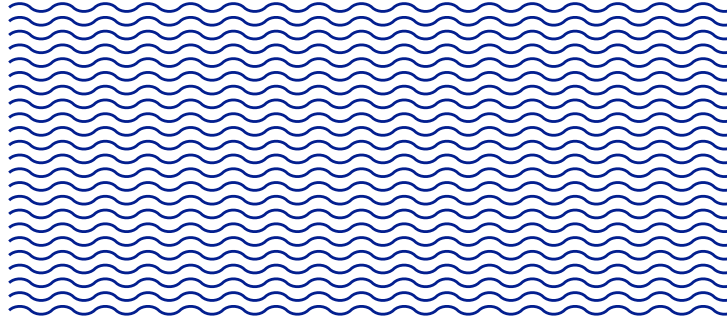




Inspirational, informative, fun, active-learning, easy to access and use for teachers, curriculum-fit, online and interactive. This is a call to action Education

Programme on the Race and ocean plastic pollution, creating Champions for the Sea based on their positive action for ocean conservation.





There are four topics:

- ◆ **What is the Volvo Ocean Race?**
- ◆ **What is ocean plastic pollution?**
- ◆ **How to reduce plastic pollution**
- ◆ **My Positive Plastic Footprint**

We have developed resources for each topic to help inspire positive action for the ocean:

- Presentation
- Worksheets (for age groups: 6-8 yrs, 8-10 yrs & 10-12 yrs)
- Student booklet 6-8 years
- Student booklet 8-12 years
- Suggested cross-curricular activities
- Evaluation quiz
- Champion for the Sea certificate
- Certificate badge for each topic

Resources are available in Chinese, Dutch, English, French, Portuguese, Spanish and Swedish.

Our Clean Seas Game!

As the Race sailors raced around the world students could join in the Race for Clean Seas with our printable board game.

[Download the game](#)

Workshops

Ocean Health and plastic pollution workshops for schools and teachers were held in the inspirational Globe theatre within the Race Villages.

More than 20,000 students participated in these workshops, where we inspired and empowered young people to help turn the tide on plastic.

Each day that school kids visited, some lucky classes were able to attend Ocean Health workshops delivered by our Sustainability Education Programme Manager Lucy Hunt in the Globe.

Some of the children were so inspired that they not only pledged to make changes in their own lives to reduce their plastic footprint, but they also took the message home and encouraged their friends and families to make their own ocean commitments.



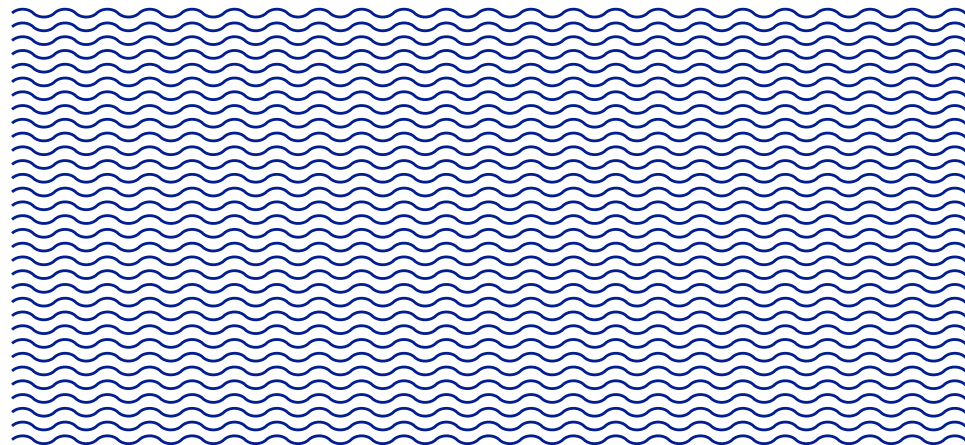
Photo: Jen Edney/Volvo Ocean Race



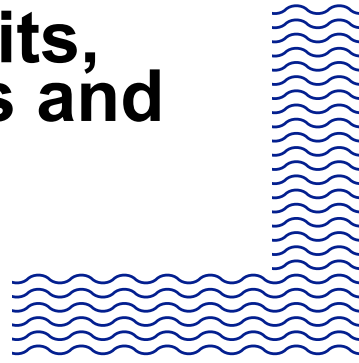
Photo: Jen Edney/Volvo Ocean Race

“The kids have really taken the Education Programme to their hearts and it’s been so inspiring to see. They’re also creating that ripple effect by taking the message home to their parents and telling them that they should minimise their use of plastic.”

Shaun Porter, Vice Principal
Dalton School, Hong Kong.



School visits, workshops and activities



Thousands of school children visited the Race Village as part of our schools excursion programme.

The kids had a chance to visit all of the exhibitions in the Race Village and see the boats. As well as our Globe-based sustainability workshops there were also other engagement activities with schools, run by teams, local stopover partners and sponsors, which also included off-site school visits.

In **Cape Town** alongside the Dutch Wavemakers we arranged a Skype call-in with a school in The Hague, where children in Cape Town were able to speak with the children in The Netherlands all about water and ocean plastic pollution.

During our **Auckland** stopover, Lucy visited Woodlands Park School and Macleans Primary school.

During the leg of the Race from **Hong Kong to Auckland**, Turn the Tide on Plastic race team's Bianca Cook, the first Kiwi woman to sail in the race around the world in 16 years, was shocked at how much debris and plastic she saw in the water. When at the Auckland stopover, Bianca took her mission to Churchill Park School in Auckland where she shared her experiences of life at sea and the plastic problem. [Read the story](#) | [Watch the video](#).

A total of 10,000 school children visited the Race Village in Itajaí on organised school excursions, of the 250 schools that attended 100 were municipal schools in **Itajaí**. All students received informative material and a souvenir 'Meu Copy Eco' reusable cup as a gift. Out of the 10,000 students on official visits, 3,000 attended our Ocean Health and plastic workshops in The Globe.

Before we even landed in Itajaí, students from the Municipal and State Education Networks of Itajaí were learning about our Ocean Health and plastic pollution campaigns through theatrical workshops

by Ilustríssimos Senhores Group. Actresses Bruna Machado and Monica Torinelli played two friends at the beach, who accompany the arrival of the sailboats and talk about Race.

Adjacent to the Race Village an exhibition centre building was activated. Downstairs was a market and exhibition, and upstairs were multiple installations with environmental and Ocean Health themes. Kids were able to participate in hands-on environmental workshops in 'The Sustainability Office' by FAMAI, and installation by Itajaí Mall.

During the Itajaí stopover we visited a Brazilian farm school to talk to children aged 6-11 about the plastic crisis, and also to find out how they are taught about protecting the ocean and the inspiring ways they are taking actions to reduce their environmental impact.

The **Newport** stopover brought the Race's focus on Ocean Health and plastic pollution to life in the Race Village. This was done through the One Ocean Exploration Zone, a tented interactive exhibition space, supported by 11th Hour Racing and co-ordinated by Sail Newport.

William Vale, who teaches at the school, also presented our Education Programme sessions to school children in the Race Village.

[Read more](#)

Displays and interactive learning from local organisations, campaigns and initiatives took the visitor on a journey of discovery on all aspects of Ocean Health, preventing plastic pollution and how they can play their part by getting involved locally. The installations featured interactive displays on science, Ocean Health, plastic pollution and broader environmental issues, all with a local focus.

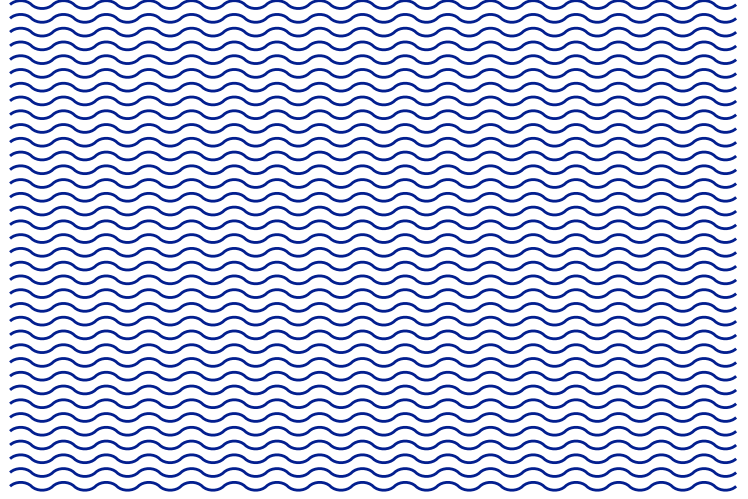


Photo: Jesús Renedo/Volvo Ocean Race

Within the One Ocean Exploration Zone in **Newport**, we featured the Race's Education Programme and Science Programme. Children were able to complete our fun, educational worksheets and played the new board game!

A full exhibitor list can be found at:
volvooceanracenewport.com/one-ocean-exploration-zone

Our scientists and educators worked at the display to tell visitors about our programme. We also analysed the contents of the Seabin in view of visitors, so they could see what was being found in the waters of the Race Village during the stopover.

Visitors were also able to take the Clean Seas pledge on iPads set out in the pavilion.

The **Newport**-born Vestas 11th Hour Racing star Nick Dana rolled back the years during his hometown stopover to visit his old school. The sailor visited St Michael's Country Day School with the Race's mascot Wisdom the albatross and Sustainability Education Manager Lucy Hunt to talk with the students about the importance of the ocean, the plastic pollution problem and how we can all be the solution by being Champions for the Sea! The children have all become ocean advocates and now track how each boat is doing in the race. The class had earlier enjoyed a live chat with the crew as they raced towards the Newport finish line. [Read more.](#)

At our **Cardiff** stopover we teamed up with Sky Ocean Rescue, Cardiff University and Keep Wales Tidy to host a fun, fact-filled day where teenagers from across Wales learned more about ocean plastic pollution. More than 250 students attended the 'Eco-Schools' event in the Race Village NoFit State circus tent.

Under the big top, they were inspired by our work to stop plastic entering our ocean, found out about the solutions to the problem and even made personal plastic pledges. The agenda also included author and TV presenter Tom 'The Blowfish' Hird, the world's only heavy metal marine biologist. [Read the article.](#)

In Cardiff the Education Team from the [National Marine Aquarium](#) ran a specialist workshop to help visitors to understand some of the physics and geography of sailing. Native 'By-The-Wind Sailors' were used to demonstrate how the anatomy of a jellyfish is similar to a sailing boat and how both use wind and currents to travel across and survive in our ocean.

Sweden's Ren Kust ('Clean Coast') organisation was present at the Gothenburg Race Village. The project is a collaboration between ten coastal municipalities including Gothenburg. Their excellent online map highlights beaches and beach clean activities. The project's presence on-site incorporated a whale structure installation (pictured above).

In **Gothenburg** our sustainability education facilitator worked with over 900 kids raising awareness of the importance of the ocean and solutions to plastic pollution in the ocean. There was no organised schools programme in Gothenburg due to summer holidays. Therefore a display and activities were set up in the Turn The Tide On Plastic team base as well as Wisdom's workshops, held in the awe-inspiring Ren Kust whale structure, for any children and families that were onsite. A Volvo Family Day was organised during the stopover in Gothenburg and our Education Programme was present, running Ocean Health and plastic pollution awareness exercises and presentations for children and families.



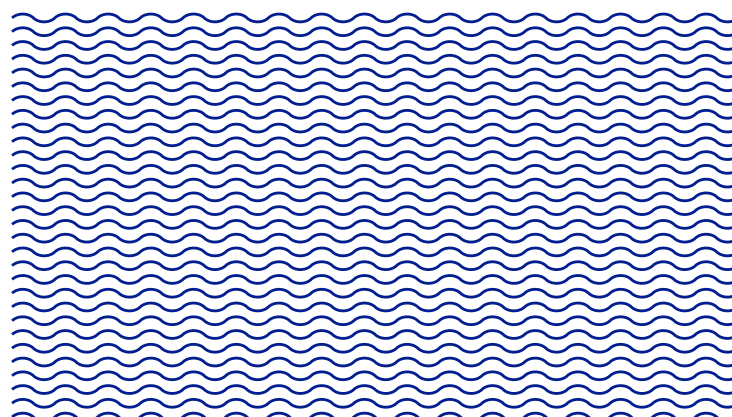
The Dutch Wavemakers, a programme aligned to The Hague finish, travelled with the race to several stopovers and entertained and educated kids about water systems. They installed their Water Lab in **The Hague**.

Bouw Je Bootje ('Build your Boat') also provided an activation in The Hague with a children's education area, focussing both on plastic pollution and boat building. Also in this activation were the Dutch TrashUre Hunters raising awareness of plastic pollution in the Ocean.

In The Hague the Optimist on Tour Laboratorium also provided environmental education for children through fun activities.



Photo: Jesús Renedo/Volvo Ocean Race



Sustainability programming and activations

Case Study



Photo: Ainhoa Sánchez/Volvo Ocean Race

Our Race Villages hosted sustainability-related activations, installations and displays.

The Globe was an installation hosting a 20 minute video where people learnt about the Race, its history, the current edition, about ocean plastic pollution and what action they can take. It included a Clean Seas exhibition.

The Globe was also the venue of our onsite school kids Ocean Health workshops. In **Cape Town** it was the venue for a three night TedX Salon focussed on plastic pollution and Ocean Health.

In Lisbon an ocean awareness pavilion was installed which featured organisations from the region that work on Ocean Health, sustainable seafood and plastic pollution issues. The local aquarium also installed an exhibition and conducted awareness workshops.

CoCreate, a programme of the Dutch government, held a [design challenge](#) at our Cape Town stopover, bringing together Dutch and South African designers to create installations from plastic waste. They also had kids education workshops, provided bicycles for all working crew and utilised the event to broker businesses partnerships around the themes of water technology innovation.



Photo: Pedro Martínez/Volvo Ocean Race

The V&A Waterfront, the venue for our Race Village in Cape Town, integrated their [Ocean Life Festival](#) into the stopover with a kids innovation station in centre court teaching the entire plastic lifecycle. Their additional programming included children's entertainment [Alex in Waterland](#), a [TEDx Salon](#) held across three nights in the Race Village Globe and a three-night [Ocean Film Festival](#) held in the cinema in the V&A. A beach clean was organised by the Two Oceans Aquarium and was joined by sailors. [Watch the video.](#)

Local sponsor NedBank support WWF and used the sustainability theme of the stopover to amplify their commitment to environmental causes, through onsite activation and sponsorship of the Ocean Summit.

The issue of plastic pollution was demonstrated in a fantastic exhibition organised by Nansha Marina at the Guangzhou stopover. This included photographs, installations, and information. Kids could participate in cleaning a beach using a litter-picking stick to dig for buried plastic in a sand installation.

Race Village visitors in Itajaí had a chance to visit the [Oceanographic Scientific Expedition Sailboat](#). This boat is an onboard research laboratory that aims to support the scientific community from UFSC (Universidade Federal de Santa Catarina) and other partner institutions, in the development of projects with a focus on initiatives linked to the sustainability of the oceans. After their visit with us they made their first oceanographic expedition to Trindade Island, Martin Vaz Archipelago, São Pedro and São Paulo Archipelago to analyse plankton communities.



Virtual reality was installed in many team bases adding a popular immersive experience. People were able to experience the thrill of sailing and virtually explore the VO65's, as well as experience life underwater.

At our **Auckland** stopover The NZ VR Project presented their Our Valuable Ocean VR experience. It is a partnership between the Sir Peter Blake Trust, NZ Geographic and Pew Charitable Trusts and is supported by Foundation North. The series of virtual reality experiences filmed underwater, show off the marine environments around the Hauraki Gulf, from areas that are full of life to those that are badly damaged.

[View the trailer.](#)



Photo: Jesús Renedo/Volvo Ocean Race

In **Newport** a series of information panels were installed which featured various Ocean Health issues and centred on each of the world's oceans. (See photo above). The One Ocean Exploration Zone was a highlight in Newport, with interactive displays on Ocean Health, plastic pollution and other environmental and science installations.

Sky Ocean Rescue activated onsite in **Cardiff** with an impressive installation featuring their #PassOnPlastic campaign. People had the chance to record their own news story featuring the plastic pollution crisis!

The Marine Conservation Society was also present in Cardiff with a display and their 'Say no to plastics' workshop for secondary pupils. Read more about their education resources [here](#).

[Keep Wales Tidy](#) brought Eco Schools secondary students from across the country to the Race Village for a 'Big Schools Day', which had a focus on marine litter this year.



Photo: Jesús Renedo/Volvo Ocean Race

An 'Eco Lounge' was set-up at the Cardiff stopover and included an educational space for classes of 30, made entirely from discarded rubbish and debris. The furniture inspired the public to think about where waste ends up, as well as the potential of reusing and upcycling.

City of **Göteborg** installed a pavilion space in the Race Village next to the Volvo Pavilion. Utilising converted shipping containers, plants and wooden structures, the installation celebrated many sustainability features of the city.

The pavilion included six companies and administrations of the City of Göteborg. In the central area were daily seminars including one on circular economy and smart cities. [Read more.](#)

Stena Recycling activated within the Gothenburg Race Village with a hospitality and exhibition pavilion. This included a display showing the types of plastic, and the use and recyclability of each type. They also displayed a car compressed down to a metal cube - the company have developed a facility where they can recycle 95% of a car.

In Gothenburg, free electric Volvo Buses, celebrating the ElectriCity project ran every 10 minutes from the city centre delivering visitors right into the Race Village's beautiful plant-filled vertical garden pavilion.



Photo: Jesús Renedo/Volvo Ocean Race



Photo: Pedro Martínez/Volvo Ocean Race

At the Race Village in **The Hague**, the Innovation Pavilion gave leading start-ups, scale-ups and SMEs the opportunity to present their smart ways to improve the world and the environment. [Read more.](#)

A Plastic Planet and Ekoplaza showcased what a plastic-free aisle can look like in their pop-up activation at our Race Village in The Hague. The idea of a plastic-free grocery aisle was first discussed at the Ocean Summit in Alicante, and within four months became a reality with Ekoplaza opening the first.

Every Can Counts activated in **Gothenburg** and **The Hague** with interactive games, to create awareness for recycling and the importance of it in a fun and easy way. This is a programme by the aluminium recycling network and does fun activations to remind people of the importance of recycling every single can.

Renewable energy installations were a feature at many Race Villages. In **Newport** wind power lighting installations were in use in the Race Village.

In **Lisbon** at the entrance was a solar power array, contributing renewable energy to the Race Village's power supply.

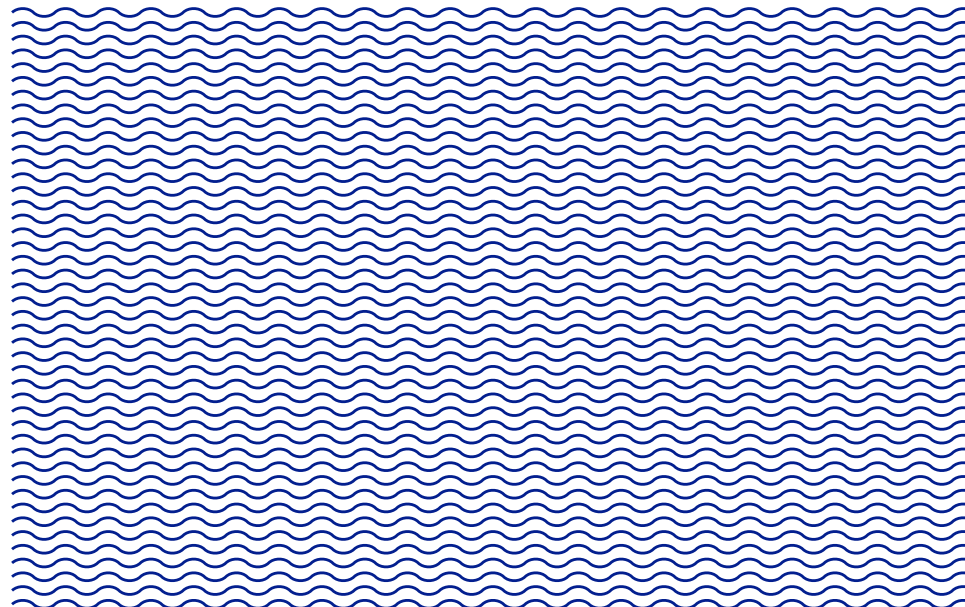
On the pontoon in Newport where the race boats were berthed, there was a solar-powered floating dock on display. Adjacent to that was an operational trash skimmer, which is working year round as part of an 11th Hour Racing and Clean Ocean Access activation.



Photo: Jesús Renedo/Volvo Ocean Race

We also incorporated the plastic pollution and Ocean Health messaging into onsite branding and messaging. This included on entrance ways, on fences and throughout the Race Village on messaging boards.

Our videos were also shown on the screens on the stages and public areas, and our MCs included mentions within their public addresses and commenting.



Community engagement

Case Study



Photo: Jesús Renedo/Volvo Ocean Race



LEGACY PROJECT

“

It's been fascinating and an honor to meet with so many different NGOs from around the world and learn about what affects their local communities. It's been inspiring to see how many individuals are truly passionate about improving the health of the oceans that we crossed as we've sailed around the globe. We are incredibly proud of the work we have accomplished as a team in raising awareness about specific environmental issues to millions of fans and followers, leveraging the high visibility of this fantastic race. ”

- Mark Towill, Team Director, Vestas 11th Hour Racing.



The map displays 12 global stopovers, each with a photo and an environmental focus area:

- 1. Lisbon, POR:** Circular Economy Portugal (Circular economy)
- 2. Alicante, ESP:** Asociación De Naturalistas Del Sureste (marine ecology)
- 3. Cape Town, RSA:** Environmental Monitoring Group (water scarcity)
- 4. Melbourne, AUS:** Take 3 (plastic pollution)
- 5. Guangzhou, CHN:** China Blue (sustainable seafood)
- 6. Hong Kong, SAR CHN:** Ocean Recovery Alliance (plastic footprint)
- 7. Auckland, NZL:** Orca Research Trust (watershed management)
- 8. Itajai, BRA:** Sea Turtle Sanctuary (marine biodiversity)
- 9. Newport, USA:** Save The Bay (wetland conservation)
- 10. Cardiff, GBR:** Cambridge Institute For Sustainability Leadership (leadership)
- 11. Gothenburg, SWE:** WWF Sweden (sustainable fisheries)
- 12. The Hague, NED:** Healthy Seas (consumer choices)

GRANTS PROVIDED BY



At every Race stopover our partners, race teams and our Education Programme undertook community outreach programmes. We have worked with schools, community groups, girls and boys clubs and university students to help participants understand our inextricable connection with the ocean, the issue of plastic pollution and how they can be part of the solution.

During our Auckland stopover, sailors from Turn the Tide on Plastic, Bianca Cook, Lucas Chapman and Bernardo Freitas, took part in the release of two, three-week old baby kiwi chicks on Motuora Island – a kiwi sanctuary crèche in Auckland’s Hauraki Gulf.

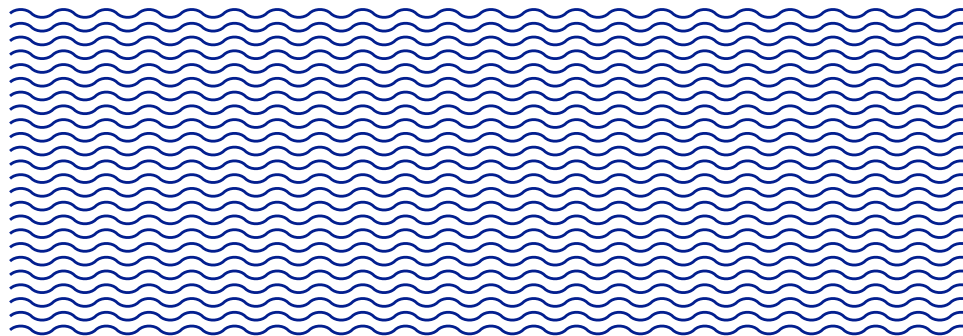




Photo: James Blake/Volvo Ocean Race

Sailors from team AkzoNobel joined company employees and residents from a neighbourhood in downtown Guangzhou, China, to unveil a special mural created by the winner of a student design competition.

Four team members – Olympic gold medalist Martine Grael, and Race veterans Chris Nicholson, Jules Salter and Luke Molloy – attended the event, where they had the opportunity to add the finishing touches to the winning design, which adorns the side of a traditional building. The mural design, themed around ocean sustainability, was chosen last year as part of AkzoNobel's sixth China Student Sustainability Awards.

Team AkzoNobel also supports The Ocean Cleanup, an innovation that aims to deploy equipment to collect marine plastic pollution from the ocean gyres.

In Cape Town, team AkzoNobel sailor Martine Grael visited a turtle conservation programme, which rehabilitates animals including some that have been directly impacted by ocean plastic.

At the Lisbon stopover, our logistics partner GAC Pindar brought together a number of stakeholders including AkzoNobel, Musto and Lisbon City Hall to host an art day for a local not-for-profit organisation, Centro de Reabilitação e Integração de Deficientes (CRID).

Teenagers from CRID's partner school, Salesianos do Estoril, and all involved had a fun time while learning how to reduce ocean plastic pollution.

[Watch the video.](#)



Photo: GAC Pindar



Photo: GAC Pindar

In Hong Kong, GAC Pindar brought youngsters from a local primary school to the Race Village to learn about plastic pollution.

Race skipper, Dee Caffari helped launch Challenge Wales' Environmental Project at the Race Village in Cardiff. The Environmental Project is the latest addition to the Challenge Wales programme to give young people who participate on sailing days and voyages an opportunity to get an accredited qualification to add to their CV, while improving a host of life-skills through the process of hands-on big boat sailing. Its development is part of the charity's Voyages of Discovery Big Lottery funded project GAC Pindar brought youngsters from a local primary school to the Race Village to learn about plastic pollution.

The Auckland stopover coincided with [Seaweeek](#) in New Zealand which presented great opportunities for synergy between our Sustainability Programme and local programming.

Auckland delivery partners embraced the concept and featured relevant content within the Legends Series on the main stage. [Sustainable Coastlines](#)' Sam Judd spoke on the stage and our team also visited their centre to speak at their Seaweeek event.

[Young Ocean Explorers](#) is a local programme (TV and educational) by ocean advocates father and daughter Steve and Riley Hathaway. They spoke in the Legends Series and also presented one of our student workshops in The Globe.

[Sailors for the Sea](#) were active in both Lisbon and Newport. In Lisbon they campaigned within the Race Village spreading the word about sustainable sailing regattas in the city. Both Race Villages were aligned with their Clean Regatta programme.

At every Race stopover our Founding Principal Sustainability Partner 11th Hour Racing visited a local not-for-profit organisation with their team Vestas 11th Hour Racing, to learn more about each organisation's environmental work and to deliver a \$10,000 grant to each project.

Grantees included:

Alicante: [Asociación De Naturalistas Del Sureste](#)

Lisbon: [Circular Economy Portugal](#)

Cape Town: [Environmental Monitoring Group](#)

Melbourne: [Take 3](#)

Hong Kong: [Ocean Recovery Alliance](#)

Auckland: [Orca Research Trust](#)

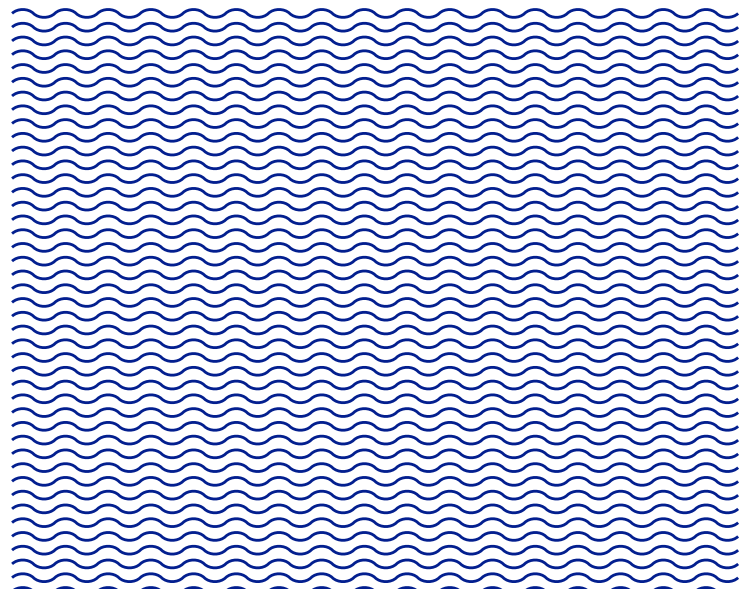
Itajaí: [Sea Turtle Sanctuary](#)

Newport: [Save the Bay](#)

Cardiff: [Cambridge Institute for Sustainability Leadership](#)

Gothenburg: [WWF Sweden](#)

The Hague: [Healthy Seas](#)



Reusable cup system

Case Study



Photo: Pedro Martínez/Volvo Ocean Race

There was the potential for hundreds of thousands, possibly millions, of disposable plastic cups to be used during our nine-month event in twelve destinations. We put effort into encouraging our stopover partners to introduce a reusable cup system for public bars.

In some of our Race Villages, there were bars that operated in a closed off, precinct or fenced environment. In these cases (Alicante, Lisbon, Cape Town, Auckland, Gothenburg) the bar operator simply had their own cups, which they operated like a typical pub or bar, with wait staff collecting cups and servicing tables.

In those cases (Hong Kong, Alicante, Itajaí, Cardiff) where a more public-event system was in place, customers could walk around with their drinks, and they had to bring their disposable cups back for a deposit.

In one Race Village a deposit was not offered, with customers forced to take the reusable cup home as a souvenir, which contradicts the spirit of the reusable cup system. Many cups were surrendered into special bins, but no refund was given. We will not permit such a system at future events.

The most successful operating system was in Itajaí, where a large public bar and dining hall was set up and everyone had to participate in the system in order to get a drink. The colourful cups were printed with special designs, and while there was a refund available, they were sought after as affordable keepsakes.

A variety of cup systems

There are different systems possible and what works for one event depends on who has financial and operational control over beverage service.

In controlled hospitality zones, cups can simply be provided by the bar or beverage sponsor/supplier. Once used, they would be collected up by staff, washed back of house and re-deployed.

For events where patrons are likely to be more 'on the go' with their drinks, a deposit/refund system can be put in place.

Special edition cups can be produced which are kept as souvenirs by patrons, offering a potential income stream for the event or vendor.



Photo: Pedro Martinez/Volvo Ocean Race

- Options include:**
- ◆ Restaurant or bar system with waiters/cleaners.
 - ◆ Deposit/refund system, via the bar or a special cup pick up/drop off point.
 - ◆ Honour system with dedicated return points.
 - ◆ Purchase an 'event cup' as a keepsake.
 - ◆ Offer self-wash stations (if health regulations allow).

Reusable cup system - Itajaí

The reusable cup system at our Itajaí stopover prevented the use of an estimated 200,000 single-use plastic cups, which were standard at previous events in the city.

An independent operator of the reusable cup system was contracted (Meu Copo Eco), who ran the rental, sale and washing system.

Using a cashless system in the food and bar hall area, customers firstly purchased (R\$5) a ticket for a cup (and a beer at the same time). They then proceeded to the cup kiosk to collect their preferred coloured cup. Cup holders could also be purchased which were very popular.

The customer then proceeded to the bar for their cup to be filled. Customers were able to surrender their dirty cup for a clean cup at any time. Hand wash stations around the food hall also served as a convenient way to quickly rinse cups out.

Based on beverage sales and cup rental/sales analysis, each cup was used on average of 2.5 times. A total of 17% were returned for refund and the rest were kept as souvenirs.

Re-use Hub Hong Kong

Case Study



Photo: Pedro Martínez/Volvo Ocean Race

To reduce total waste, particularly single-use plastic, a washable system was instigated for Food Trucks and the Bar at our Hong Kong stopover. The following was sourced via our contractor.

We use:

- ◆ **250ml cups for wine and spirits at the bar, and for water.**
- ◆ **500ml cups for beer at the bar and juices and smoothies by the food trucks.**
- ◆ **Plates and cutlery for the food trucks.**

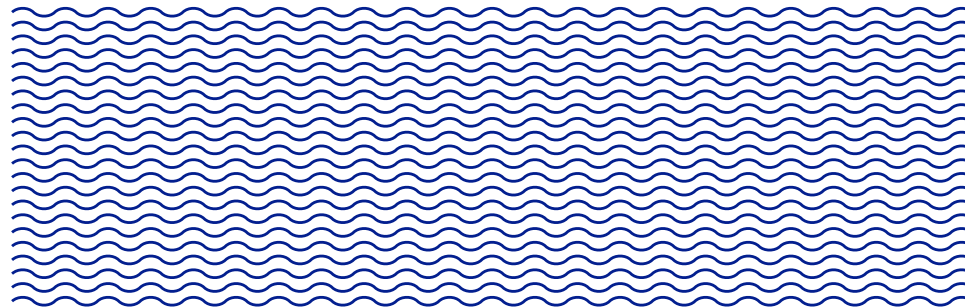
The Bar was provided an allocation of up to 1,500 cups each day, strictly monitored by the supplier. Up to 500 additional cups were provided to Food Trucks.

Each morning the food trucks were supplied a total allocation of 200 plates. Many more plates were needed but we had to be put a limit on the number given our offsite washing logistics and test-run budget allowance. Certainly, having onsite washing would make the system far more viable and scalable. We were restricted with washing onsite as the site owner did not allow us to access the water mains or sewer lines and therefore it was untenable to manage the washing onsite.

Customers were provided their meals on reusable plates or bowls, but we did not hand out the cutlery. Customers had to then come to the Re-Use Hub to collect their cutlery and decide if they needed a paper straw.

This preliminary visit to the Re-Use Hub to pick up cutlery was critical – as it offered a chance to engage customers in the fact that they were having a single-use plastic avoiding meal! It also showed them where to bring their reusables back when they were finished, as there were no cleaners assigned to the food truck eating area and so it relied on patrons to clear their own plates. It worked very well!

Customers returned their plates to the Re-Use Hub and dutifully scraped their food waste into the buckets, and returned their washable plates, cutlery and cups.



Compostable serviceware

Case Study



Photo: Jesús Renedo/Volvo Ocean Race

With the Race's objective to reduce single-use plastic, a focus is placed on reducing the impact of disposable food serviceware.

The first option is to have reusable serviceware. This was achieved in crew catering and corporate hospitality zones and in our trial run in Hong Kong.

See ['Re-use Hub' case study](#).

For most other public catering, compostable serviceware was used, mainly bagasse (sugar cane fibre).

A few plastic items were still in evidence such as condiment containers and single serve milk, which were problematic.

See ['Plastic leaks' case study](#).



Photo: Jesús Renedo/Volvo Ocean Race

Plant plastic cups and containers

In some Race Villages, where reusable cups were not used, and in some cases for food containers, plant plastic, (PLA - polylactic acid) was used. This material is made from cornstarch, and is clear in appearance, looking like plastic. Specialised industrial composting facilities are needed to process PLA, which is not always available.

These cups and containers are problematic as they cause confusion with the user upon disposal, as they look like plastic. If these items are placed in the recycling bin, it will contaminate the plastic recycle systems. It also presents a communications challenge too, as it may seem that we are using plastic.

A large amount of PLA cups were found in our recycling bins. We had back-of-house segregation stations where this was the case, to try to decontaminate the recycling streams.

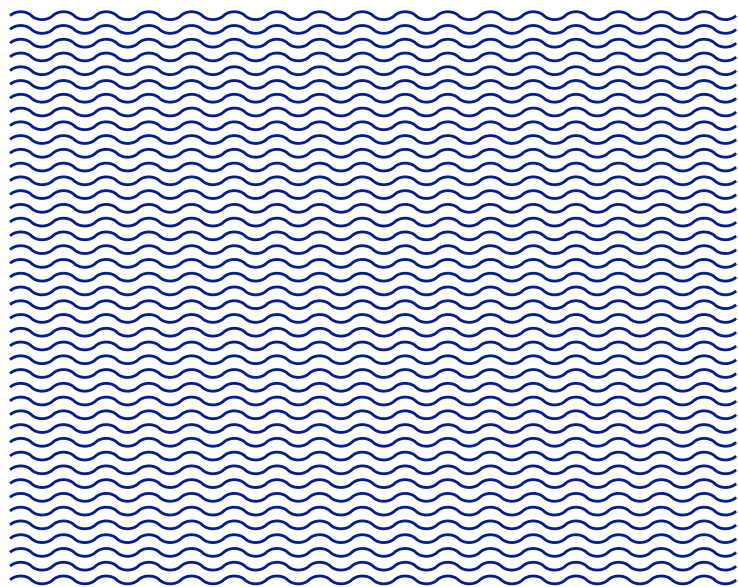
Lessons learned: We will not permit PLA items at any Race Village in the future unless it is completely integrated into the existing local waste management recovery systems and used at all times locally. We will require reusable or compostable (natural fibres) for public catering serviceware. We will only allow washable and reusable cups for crew and volunteer catering.



Photo: Jesús Renedo/Volvo Ocean Race

The compostable serviceware was destined for composting in most cases, collected via the compost bins in our Race Villages. In many cases, notices were placed on compostable items and our volunteer Green Team positioned next to bins to assist in segregation and collection of the compostable serviceware items and food.

Effective compostable waste collection is reliant on great signage, all options of bins being available at all times, and ongoing compliance checking and quality control by a dedicated staff member or volunteer.



Resource recovery

Case Study



Photo: Jesús Renedo/Volvo Ocean Race

Events can produce large amounts of waste. Our ambition was to firstly reduce total potential waste by identifying what could be avoided, and then to optimise the resources which were recovered, to feed the circular economy.

Total Waste	342.65 tonne	Percentage
General Waste	174.9 tonne	51.05%
Timber recycled	46.3 tonne	13.53%
Plastic recycled	17.7 tonne	5.17%
Other recycling	68.8 tonne	20.08%
Compost	29.8 tonne	8.71%
Salvage	5 tonne	1.46%

With twelve diverse destinations, and varying capacities and interest on behalf of our delivery partners, we had to navigate twelve different models of managing resource recovery. As there were often existing cleaning contracts in venues or arrangements with local government waste services, it was a challenge to always instigate what we believed would be best practice.

Our approach was to investigate the situation considering all stakeholders, possibilities and limitations, and where it was necessary and viable, we added additional operations, services or support to maximise resource segregation, collection and eventual recycling or composting. Our ambition was always to avoid landfill and to extract maximum resources before energy to waste.

Despite our efforts only 45.58% of waste was recovered, avoiding landfill or waste to energy. In **Gothenburg** and **The Hague** timber and residual waste went to energy recovery, and if this is included then our overall resource recovery rate is 66.62%.

Percentage of resources recovered

45.58%

total recovered,
excluding waste to energy

66.62%

total recovered,
including waste to energy

Material analysis

The least waste-intensive stopovers were, not surprisingly, those with reduced public catering onsite. The amount of waste per person where we had dedicated food courts and a captive audience was on average triple that of those where minimal catering was in place.

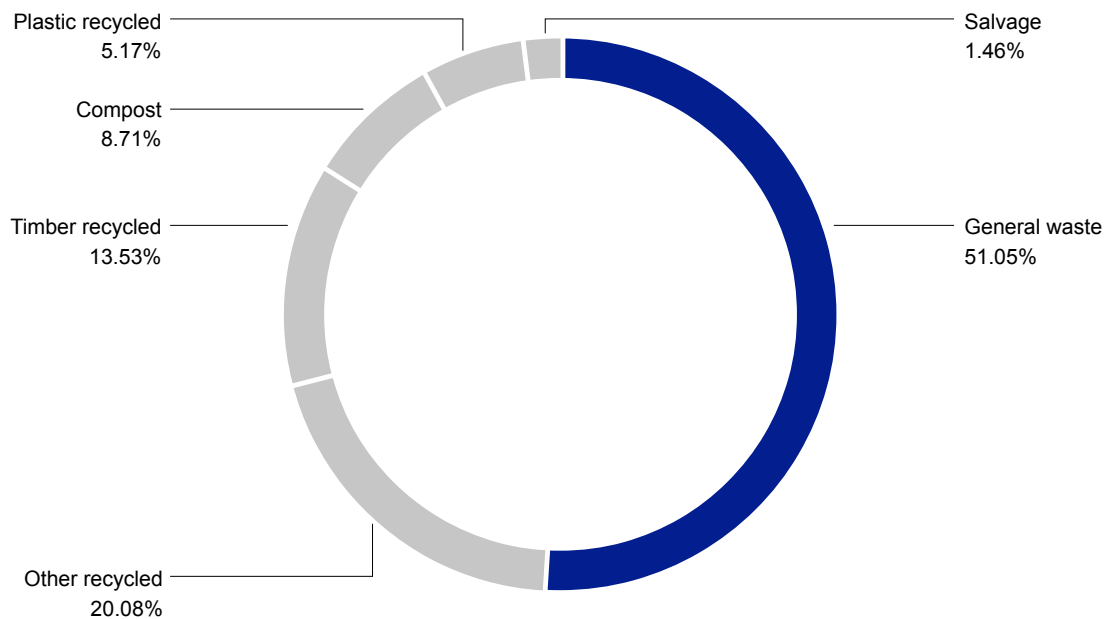
This was due to our, and most event's, reliance on disposable serviceware. While we focussed on compostable serviceware and subsequent collection of this for composting or biogas (waste to energy), it is still a resource that is designed for a moment's use.

In Hong Kong we trialled a reusable crockery and cutlery set-up, which showed it is possible to have this operating at an event such as ours,

for the public catering area. We will investigate the operational and financial viability of this system being expanded at our future events. The challenges will be availability of crockery and cutlery for rent, the production requirements for water provision, waste-water management, the health and safety considerations, and the costs of infrastructure and staffing.

If we are able to remove short-life disposable food and beverage packaging from our waste stream, we could reduce our event-days waste by two thirds. We are highly motivated to further investigate what we can achieve in this area.

Total waste recovery percentage



Resource loss

We estimate that 25% of total waste was lost from recovery because of mishandling by our own personnel, cleaning staff and by the general public. Apart from the predictable human nature element (!) this loss was also due, in some circumstances to not enough staff, clear signage, quality control management and conveniently located bins. In some situation we assessed that attention, importance and resource allocation was not prioritised.

Best in class performers!

In **Cardiff** and **Auckland**, we achieved 80% recovery rates.

Both Race Villages had bins with great signage. A key factor in success was having contracted, highly engaged waste contractors who specialised in events, and importantly, that they had excellent onsite management and conscientious cleaning staff. In both of these locations we had additional back of house pre-sorting and decontamination set-ups.

In Cardiff we had a captive audience in the Race Village, and we were able to control the food traders serviceware - this meant there was little food and beverage packaging travelling to the site from outside, simplifying the separation systems.

In Auckland we had 'travelling-through' attendance, with a popular walkway running right through the Race Village. There was not a dedicated food court and many people brought food and drink on-the-go from neighbouring shops.

Contamination of bins none-the-less happened in both scenarios, despite the great bin signs and attendees in these locations with a predisposition to caring about recycling and resource recovery.

The incorrectly placed waste in bins was remedied through the back of house sorting.

All of these factors lead to the excellent recovery rates of 80% and this is something to aspire to for all of our future Race Villages.



Photo: Jesús Renedo/Volvo Ocean Race

Plastic footprint

We had an obvious mission to reduce our plastic waste and ensure any that was created was sent for recycling. We have estimated our plastic footprint, to be **22.1 tonne**. This is based on hard data and extrapolations where only co-mingled recycling was possible. We estimate 20% of our total plastic footprint was lost to landfill due to mishandling.

Through our water refill points and not selling any plastic bottled water, we were able to avoid the creation of an estimated 7.7 tonne of plastic. Through our focus on single-use plastic avoidance in food and beverage service-ware, we estimate an additional **1,000,000 items** were avoided through replacing plastic disposables with compostable or re-usable options.

We attempted to trace the onward journey of all our recyclable material to have transparency on where it was being sent for recycling. In Hong Kong we even got in the truck and accompanied a lot of our materials to the recycling facility. Plastic sent for recycling was in some cases re-processed in the country it was generated, but in many cases it was either shipped offshore or the contractor was unable or unwilling to provide us details on the chain of custody for the plastic recycling.

With China and Thailand now not accepting imported plastic for recycling, it is important for us to consider where the plastic we generate will eventually be recycled. In **Cardiff** and **Hong Kong** we were able to connect with local plastic reprocessors who were able to accept our plastic and we could be assured it would be responsibly processed. This reverse logistics tracing is essential.

Our results in numbers

21.1 tonne

total plastic footprint

17.7 tonne

total plastic recovered

2.6 tonne

soft plastic recovered

7.7 tonne

plastic water bottles avoided

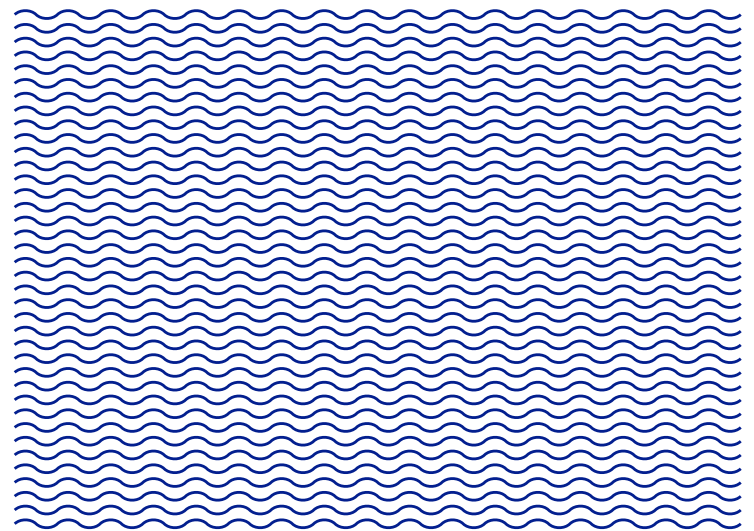




Photo: Jesús Renedo/Volvo Ocean Race

A focus on soft plastic

There are some single-use plastics we just can't avoid using – such as shopping bags, cling film and bubble wrap. These 'soft plastics' are usually not welcome at local recycling plants, as they get entangled in machinery. So unless a special collection system is set up, this soft plastic usually will go to landfill.

We had a special focus on film (soft) plastic as this is a plastic type we cannot influence the avoidance of too much. In several of the stopovers we specifically targeted soft plastic collection and through this recovered 2.6 tonne. This would otherwise have gone to landfill as the materials recovery facilities that event waste goes to generally do not accept film plastic.

In **Auckland** we teamed up with The Packaging Forum, Redcycle and Abilities Group to take all of our plastic film waste for onward recycling and conversion into furniture and road devices. Soft plastic, such as bubble wrap, cling wrap, pallet wrap, shrink wrap and plastic bags are a type of plastic that is difficult for us to control prevention of at our Race Villages.

Cardiff Council developed a partnership with RPC bpi Recycling, who specialise in soft plastic collection and recycling. Located just an hour away from the event site, the film plastic recovered from the Race Village was sent to the local facility for re-manufacture into other plastic products including park benches!

The Sustainability Team visited the site. [Read more](#) about this terrific programme.



Photo: Damian Foxall

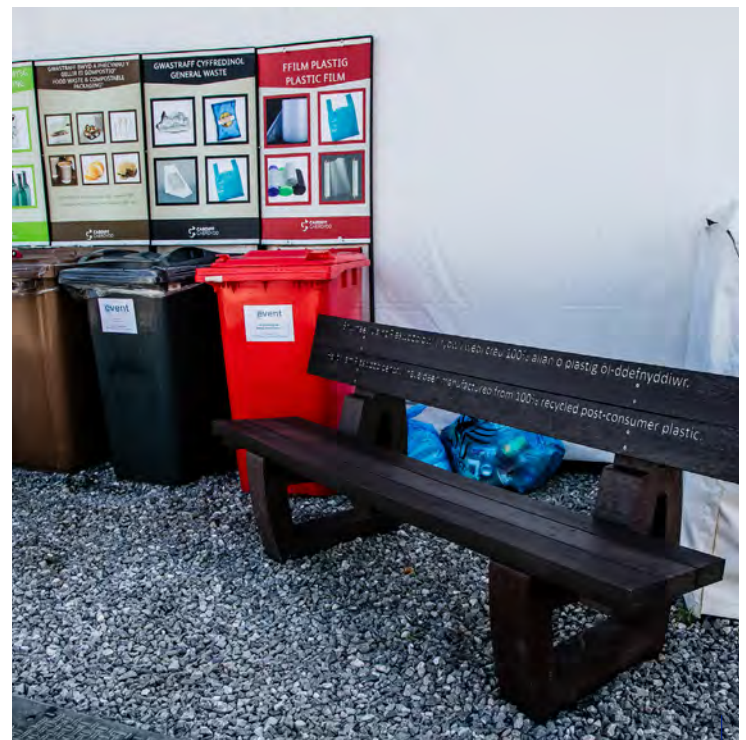


Photo: Jesús Renedo/Volvo Ocean Race

Food and compostable waste

29.8 tonne

total compostable waste recovered

Food waste is a weighty addition to the waste measurement as it is dense and heavy, and so takes little volume but weighs a lot. A comparison is a full 240L wheelie bin of food waste could weigh 200 kg whereas if it were full of plastic bottles it could weigh as little as 20 kg.

We worked hard to remove food waste from general waste to avoid it going to landfill. When added to landfill, food and other biodegradable waste rots down and produces methane, which is a potent greenhouse gas. In many locations, effective landfill gas capture is not in place. As a first preference we look to collecting this waste and sending for composting, biodigestion, or to a dedicated biogas facility (waste to energy).

See the [‘Compostable resources’ case study](#) for more details.



Photo: Pedro Martínez/Volvo Ocean Race

Timber

Timber from broken pallets, construction offcuts and decommissioned infrastructure is also a heavy contributor to waste measurements.

We produced a considerable amount of wood waste, and for this reason we have reported it separately.

Timber made up 28% of all production waste.

Timber was either mulched or sent to be chipped to provide biomass for energy recovery.

46.3 tonne

total waste timber recovered

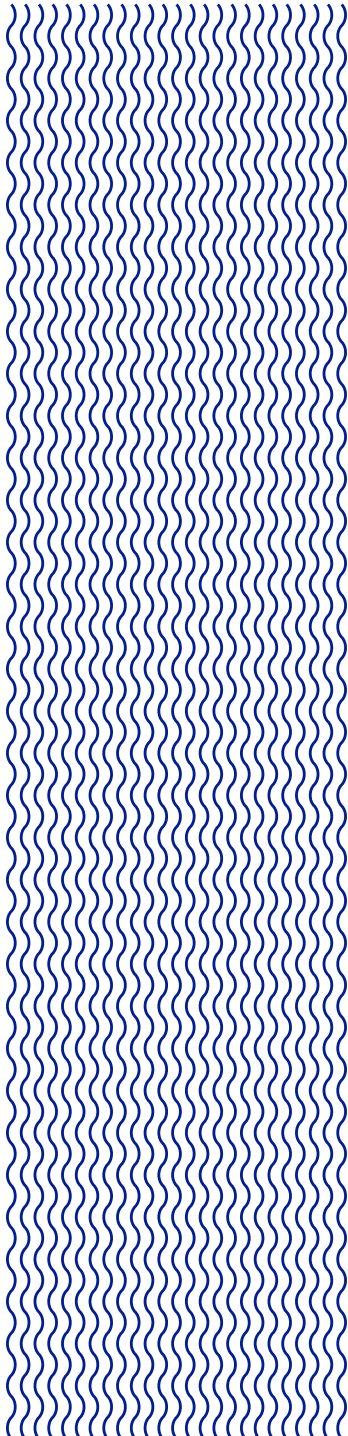


Photo: Jen Edney/Volvo Ocean Race

Pre-race and end of route waste

A total of **38.9 tonne** of waste was generated pre-race in Alicante and Lisbon during the initial site builds, with a 51% diversion rate. An estimated **47 tonne** of waste was generated in Gothenburg and The Hague during the final 'bump out' with only 34% sent for recycling. The remainder was sent to incineration for waste to energy.

In Alicante and Lisbon, as the the first stop for Race Village infrastructure on each 'route', there was more production waste generated than other stopovers. In Alicante, as the home of the Race, we had some site clearing to do from the previous edition and in Lisbon as the home of the Boatyard, there was waste from the boat 'assembly period' where the race boats and teams prepare for the race. Gothenburg and The Hague were the 'end of route' for each of our parallel transport routes for our touring infrastructure including teams' equipment, and there was final waste generated that was not attributable to the local Race Village but rather the whole of race.

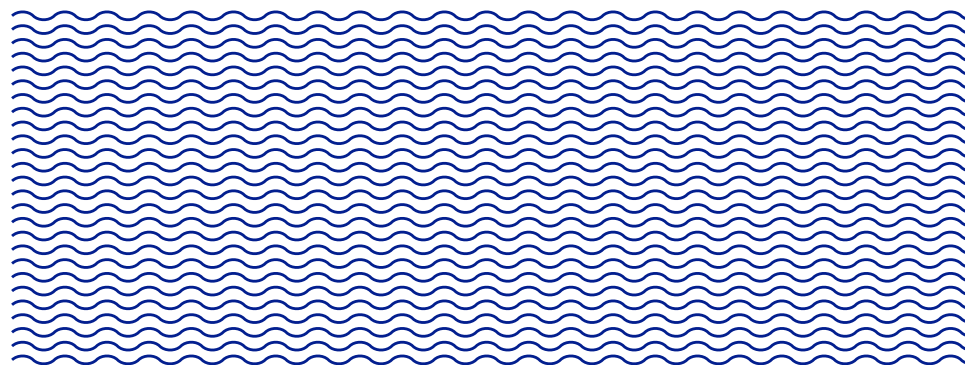
A total of 40% of the pre-race waste was actually timber from preparing the Volvo Pavilion, because much of the deck and timber detailing was finished onsite. All was sent to timber recycling/energy recovery. Throughout the entire Race 46.3 tonne of timber was collected.

Lessons learned: It is important during the build, pre-event, bump out and end of route periods that waste systems are responsive to the needs of production staff.

Having statically-located bins is not useful as staff need to move the bins to where the waste is being generated. Therefore having cleaning staff available to service the waste and bin needs in response to what waste is being generated is essential.

In several stopovers not enough cleaning staff or bins were available to manage pre- or post-event waste.

Apart from having enough staff and equipment, during these pre and post-event periods, cleaners should be given the duty to actively recover materials for recycling and to 'work' the bins to be responsive to what waste is being generated in various locations.



For example in the pre-event period pallets may be entangled in film plastic, cardboard and packing tape. Rather than the temptation to pick it all up in one bundle and place it in whichever bin, cleaners should be instructed to separate the materials into individual items and place in the correct bin. We should not rely on production staff or contractors to do this degree of waste separation. They are under time pressure and just won't do it. Cleaning contracts must include consideration for this staff and infrastructure requirement.

Alicante

Race Village waste



Photo: Pedro Martínez/Volvo Ocean Race

In Alicante we engaged two resource recovery focussed people to work alongside the existing waste contractor and cleaners. One person worked as an educator, going around to the various production areas (caterers, bars, team bases) to engage our production personnel in good practice. She also worked with the cleaning company and fed-back regarding any problem areas that needed attending.

The second person was a 'hands on' recovery agent. When production staff abused the planned segregation(!), his role was to decontaminate the bins and salvage materials back into the correct bin, with the hope of future compliance by staff. The photos show an example of 'before' - contamination of the bins when left unattended, and then 'after' our resource recovery agent did his work.

Through this intervention we were able to divert 58% of waste from landfill, of the total of 21.95 tonne generated. A much lower percentage would have been recovered if onsite sorting had not happened.

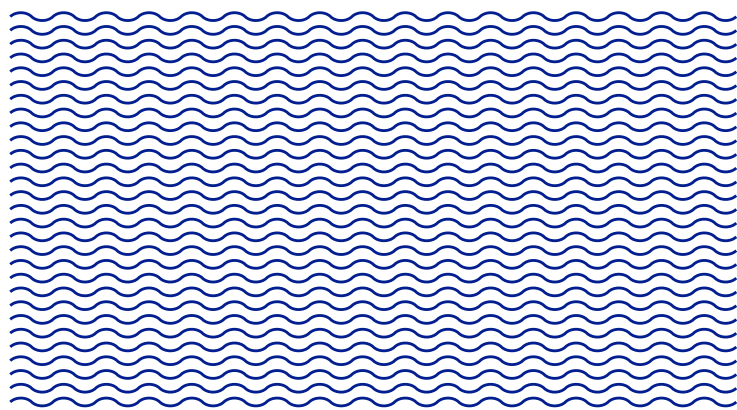
We collected a total of 2.63 tonne plastic and it is estimated an additional 20% was lost to landfill. Almost 1 tonne of plastic was avoided by preventing the sale of single-use plastic water bottles.

Lessons learned: It is important to have these quality control cleaning and resource recovery people built into the cleaning team, who are reporting both to the event organisers and the cleaning contractor.

With Alicante likely to be the start location for future races, it is important that an 'assembly period' waste management plan be put in place.

In previous years a different waste company, highly experienced in event waste, detailed segregation and excellent measurement and reporting was contracted. It is recommended that this or a similarly experienced event waste company is engaged.

The Race Village is on state/port land, and this restricts the ability for engagement with the potential excellent integration with Alicante City Hall. For example they have a composting programme, to include compost collection ability for events, which was very difficult to coordinate due to their lack of authority over the Race Village site.



Lisbon

Race Village waste



In Lisbon we engaged Circular Economy Portugal to work with the stopover, Boatyard and cleaning company to improve the likelihood of successful onsite segregation and eventual processing.

We generated a total of 14.3 tonne of waste, of which 54.32% was diverted from landfill. The total plastic footprint was not measured separately. Almost 150 kg of plastic was avoided by preventing the sale of single-use plastic water bottles. (shorter stopover period than Alicante).

It was revealed early on that our waste would be picked up by municipal waste trucks and that we could get no guarantee of eventual recycling. We decided to engage a commercial contractor to have dedicated pick-ups for various materials streams, including compostable waste.

We had similar issues in Lisbon as for Alicante regarding contamination of waste by production personnel, however as they had already received some training Alicante they were more receptive to our systems. Circular Economy Portugal attended the site each day during the production period to attend to the waste and decontaminate bins and educate staff. Re-assembling bin stations was always required, as the staff moved the bins to where the waste was being generated, which changes from hour to hour during the build of an event site.

Achieving good participation and compliance by food traders to our waste system was difficult in Lisbon. The staff were all temporary and had no incentive or directive by the vendor ownership to comply to our systems or even to take notice of our staff's (Circular Economy Portugal) instructions.

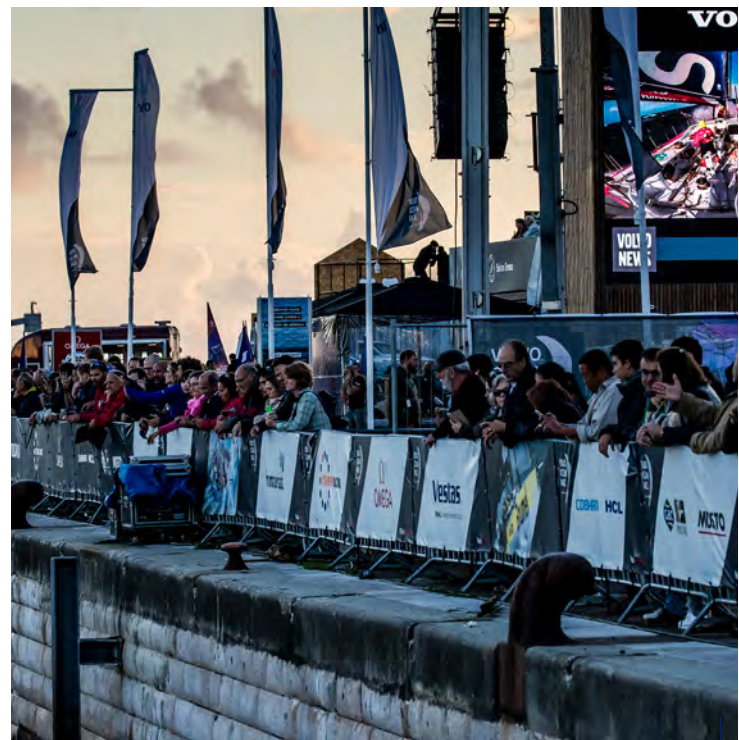


Photo: Jesús Renedo/Volvo Ocean Race

As soon as our eye was off them, we ended up with disastrous waste segregation and it was a constant battle to ensure compliance. The photo shows how the caterer left the waste at the end of the event. This was due to no cleaners being scheduled to work during the timing of the bump out of this vendor and also the staff of the vendor were not willing to access the bins placed only 50 m away from them.

Lessons learned: Engage the catering contractor and food stalls during the contracting period to ensure they are willing to comply, and include requirements and penalties in their contracts if bad practice is experienced.

We developed bespoke bin signage for the event for the public areas, which featured three separation streams. We were not able to get confirmation of compostable serviceware from the vendors prior to the event and so we adapted our system to include another bin for food serviceware that was compostable.

Correct placement of waste into the correct bin was always going to be a challenge as having such a separation system is not typical at events in Lisbon, nor in households there. We placed Green Team volunteers at each of our bin stations, to reduce contamination. Inevitably, as soon as a volunteer moved away from the bin, we got contamination!

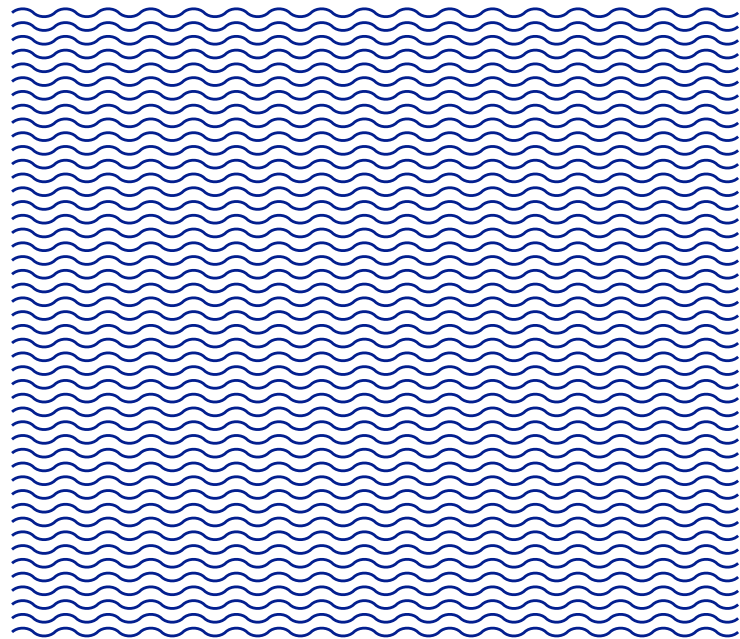
Lessons learned: We have plenty of space at the Lisbon event site to create a back of house sorting station to decontaminate bins. Wherever this has been in place at other stopovers we have seen excellent recovery results.

Cleaning staff were also a challenge with constant checking required, especially back of house and in the offices/media centre, to ensure they handled the various materials correctly.

Correct handling of waste must be included in performance expectations and contracts with the cleaning company. Additional staff should be placed within their team (and budget provided) to add that extra layer of quality control and staff supervision to ensure compliance.

Paid staff could be placed at the public bins to ensure no bin stations are left unattended (as volunteers wander off).

The catering/public food court vendors need to be confirmed early enough to allow for correct training and engagement with them. Packaging requirements and participation in our waste systems need to be included in contracts.



Cape Town

Race Village waste



In Cape Town the Race Village was held within the V&A Waterfront precinct, which is a shopping centre, entertainment and dining precinct. This venue has existing bins which were utilised for the public spaces, and augmented on the wharves where many of our structures and Race Village elements were placed.

A total of 4.59 tonne of waste was generated with 47% diverted from landfill for recycling. Of this recycled material 45% was plastic recovered through our special focus on plastic footprinting. Almost 1 tonne of plastic was avoided by preventing the sale of single-use plastic water bottles. A total of 981 kg of plastic (soft and hard) was collected.

The V&A separates waste into 'Wet Waste' and 'Dry Waste'. Wet waste goes to landfill and dry waste is predominately recyclable material. The V&A has an onsite sorting station, which helped with the extraction of the recyclable fractions.

We had back of house production waste bin set-ups (timber, metal, cardboard, glass, plastic), during the site build period and during operations, for team bases and hospitality vendors and DongFeng Pavilion. The overall diversion from landfill rate was very low (29%) due in part to the timber waste and food waste which is quite weighty, going to landfill.

We worked with NCC Environmental Services, a Cape Town based organisation to assist with compliance by our production staff, decontamination, managing our Seabin, and doing a waste audit on our Race Boat waste.

We had a special focus in Cape Town of collecting our plastic waste, especially film plastic, separately. NCC staff worked on ensuring all plastic appearing in our production waste was identified and extracted. This focus led to 21% of total waste actually being plastic (half of which was hard plastic and half of which was soft plastic such as pallet wrap).

Lessons learned: Specific material focus and dedicated staff to work the recovery, leads to success!



Photo: Ainhoa Sánchez/Volvo Ocean Race

Melbourne

Race Village waste

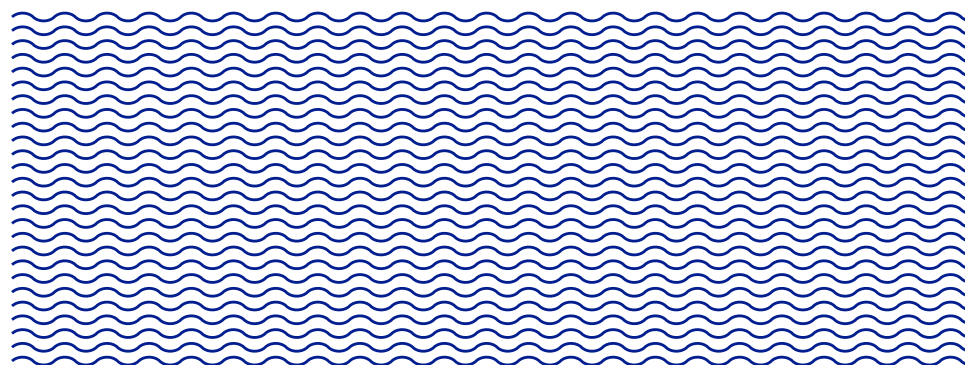


Photo: Jesús Renedo/Volvo Ocean Race

Melbourne Race Village had a bar and a series of food trucks generating food and beverage waste. The cleaning company sent their waste to an offsite resource recovery facility owned by them for post event sorting, before sending it for onwards segregation and recycling or composting.

No waste results were provided by our stopover partner, however previous experience with this waste contractor showed that their system is effective and we are confident the maximum recyclable and compostable material was recovered through their processes.

Lessons learned: For smaller stopovers there still must be adequate control over food trucks and their sale of single-use plastic beverage drinks and also of PLA. Better communications is needed on bins to the public. The use of the cleaning contractor, regardless, resulted in confidence in the successful recovery of waste materials.



Hong Kong

Race Village waste



Our Hong Kong stopover was particularly challenging as the cleaning contract negotiated was only to provide general waste skips and bins. No recycling or compostables collection and onward processing were included. The cleaning staff and contractor refused to handle any recyclable material until the last days of the event when we convinced them that handling recyclable material and placing it into different bulk receptacles adjacent to the landfill rubbish skips was not extra work for them.

As there are materials merchants in Hong Kong dealing separately with cardboard, metal, soft and hard plastic, glass and food, we did deals with each merchant. All materials were stored onsite and collected in one pick up, post event.

The incumbent cleaning contractor eventually offered to manage the collection of the recycled materials but could give no guarantees for the chain of custody in onward processing so we decided to keep with our devised plans.

To avoid as much going to landfill as possible, we arranged significantly more bins than originally planned so we could set up separation of materials for both back of house and public areas.

Across the event total waste generated was 26.1 tonne. While we were very proud of our efforts, the overall diversion from landfill figures were not good (26.5%), as we were constantly countering the cleaning company who were intent on sending as much to landfill as possible. A total of 27% of all waste was generated during the event build, with all of it going to landfill.

Through our volunteers and our dedicated resource recovery agents via The Purpose Business and Sea Dragon Marine, both based in Hong Kong, we were able to successfully collect 6.96 tonne of resources to send for onward recovery. Of this, 3.5 tonne was food waste for composting. Almost 0.5 tonne of plastic was avoided by preventing the sale of single-use plastic water bottles. A total of 253 kg of plastic was collected and an anticipated further 20% lost to landfill.

Our resource recovery compounds were very satisfying to view, with cardboard, glass, plastic and metal stockpiling over the duration of the event. There is a phenomenon in Hong Kong of merchants collecting recycling (and charging customers for the pick-up) but then dumping the materials rather than sending for recycling.



To ensure we had complete chain of custody assurance for the reverse logistics, we accompanied much of our resources to their final processing destination. Pictured is our resource recovery agent from The Purpose Business, Vicky Lee, accompanying our cardboard waste to the recycler.



Photo: Richard Edwards/Volvo Ocean Race

Lessons learned: At future events in Hong Kong we must significantly increase the capacity of the cleaning company to handle our waste and put recycling requirements on them. Single stream sorting should be done in a more rigorous fashion to extract the large volume of materials lost to landfill last time. This could include a back of house sorting station to go through bin bags and to intercept anything from being thrown into the landfill skip. The re-usable system should be expanded so that no disposable containers are used at all. Unless things change in the assurance of recycling in Hong Kong, we should continue to have single-material merchants as the recipients of our recyclable and compostable material.

Plastic recycling in Hong Kong, like many countries, has been affected by the restriction on imports into China of plastic for recycling. We searched hard for a recycling processor within Hong Kong that would agree to take our plastic, particularly our soft plastic. A total of 187 kg of soft plastic was collected. The effort we put into the collection needed to be better however, as we did not separate the soft plastic by type. As we had engaged so well with the processor and they saw this as an opportunity to illustrate the problems with plastic in Hong Kong, they thankfully put extra effort into further separating and processing our soft plastics. They also presented at our Ocean Summit and Sustainable Event Workshop in Hong Kong. Merrin Pearse of The Purpose Business is pictured at the plastic recycling plant where our plastic was processed.

As the Hong Kong site was in a tricky location to get to, with no surrounding shops or restaurants, we were able to control the sale of food and beverage packaging and therefore that which entered our waste streams. Through restricting single-use plastic provision by bars and food trucks, we only had 67 kg of plastic collected for recycling. We believe some was still lost to landfill (estimated 20%) through incorrect segregation, but the plastic footprint is still remarkably low for an event in Hong Kong.

With the bars having a reusable cup system and our food vendors supported with reusable and compostable crockery and cutlery, this resulted in an estimated 1 tonne of plastic avoided - which is about 50,000 individual plastic items.

Guangzhou

Race Village waste



Photo: © 2018 Power Sport Images

Our Guangzhou stopover partners did a terrific job in reducing potential waste (particularly plastic waste) that could have been generated during the event days. Almost no single-use plastic was in evidence, throughout food service and exhibition stalls.

The challenge during this stopover was the huge amount of single-use plastic in branding and the use of plastic in packaging during the production/build of the site. No details were available on complete chain of custody of materials handling after it left the site, however

with the intention of the delivery partners and our knowledge of the extent of recycling happening in China, we are confident that our materials did not all hit landfill.

In total 15.3 cubic metres of waste was reported, which we estimate to weigh 2 tonne. We anticipate 50% of this was able to be recovered for recycling. An estimated 90 kg of plastic was avoided through the water refill points and absence of bottled water for sale.

Auckland

Race Village waste



The engagement of specialist event waste company (Clean Event NZ) whose owner (George) has a personal dedication to excellent resource recovery, and an amazing team of relentless on the ground staff, facilitated excellent results at our Auckland stopover.

A total of 23 tonne of waste was generated during the month-long event, with 80% collected for recycling or composting, including the pre/post and event days.

During the event days, 87% of waste generated was extracted and avoided landfill. 100% of all plastic was separated onsite for onward recycling, totalling 800 kg. Almost 1 tonne of plastic waste was avoided due to our water refill stations. We collected 554 kg of soft plastic in total.

However despite the intention and positive intention of Auckland's citizens, a large amount of mis-filing of materials still occurred. We conducted a bin contents audit which revealed some interesting disposing behaviour:

- 60% of items (by volume) in the general waste bin were actually recyclable, and 5% compostable.
- 10% of items in the recycling bin was food which could have been composted.
- 5% of items in the recycling bin were actually not recyclable.

Based on the waste audit this means potentially 1.7 tonne of food waste was lost to landfill.



Photo: Jesús Renedo/Volvo Ocean Race

Luckily the waste contractor operated an onsite sorting station back of house which recovered all recyclable waste from general waste bins, which lead to the excellent resource recovery rate of 87% during event days. The food waste could not be recovered for composting however.

With the assistance of the NZ industry group The Packaging Forum, our waste company Clean Event NZ placed highly engaging bins throughout our Race Village which pushed the message of the importance of materials segregation.

Itajaí

Race Village waste



Waste management and resource recovery at our Itajaí stopover was done in coordination with local recycling cooperative [COOPERFOZ](#). This group had a 'waste triage' onsite and separated out the various recyclable materials for recovery.

Bins were separated into 'Recyclable' and 'Non Recyclable' material. Compliance with separation by Race Village attendees was very poor with little attention paid to the distinction between each bin. Cleaners likewise mixed waste from each bin into the same rubbish bags and did not help in the resource separation. The front of house bin separation was somewhat 'ornamental' as the onsite MRF (materials recovery facility) and the consequential offsite MRF operated by COOPERFOZ extracted the various recyclable materials.

A total of 52 tonne of waste was produced, down from 58 tonne in the previous edition. With an increased attendance this means an overall reduction in waste of 35%.

A total of 38% of all waste was recycled. Currently, only 3% of waste is recycled from the city of Itajaí so our efforts were impressive.

An estimated 1.1 tonne of single-use plastic bottles was avoided due to water refill points.

An estimated 5.5 tonne of plastic was recovered for recycling and all but food contaminated polystyrene containers (500 kg) was estimated to have been recovered for recycling. Reported more fully in the 'Plastic Leaks' case study, it was unfortunate that these were part of the waste stream with some 50,000 units being used by the food court. This material all went to landfill as food-contaminated plastic or polystyrene cannot be recycled locally.

Collected also was used cooking oil, not done in such a way at any other stopovers.

Waste from the Itajaí stopover was sent to a recycling centre to be sorted and sold by the COOPERFOZ cooperative. The cooperative



Photo: Pedro Martínez/Volvo Ocean Race

employs 35 people, many of whom come from disadvantaged backgrounds. They are paid a living wage and given opportunities to learn new skills.

Currently 135 tonne of waste each month are recycled through the COOPERFOZ initiative.

The COOPERFOZ facility was visited by our sustainability team. [Watch the video.](#)

No food waste was collected for composting as there is no service available in Itajaí.



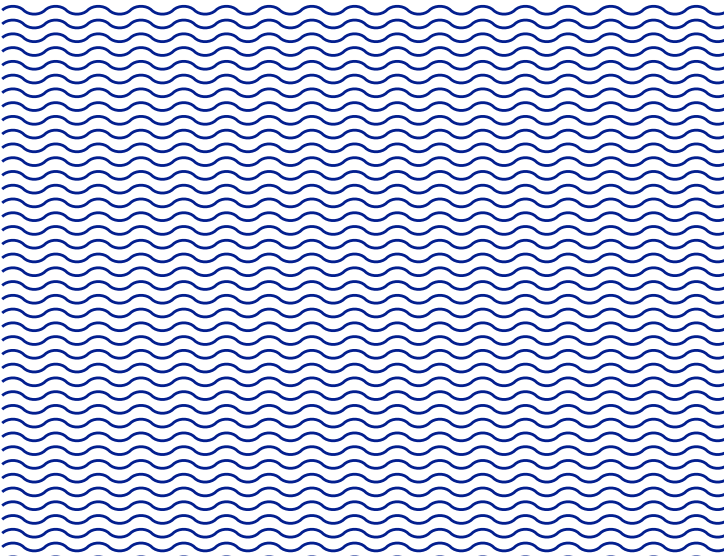
Photo: Pedro Martínez/Volvo Ocean Race

During the Auckland stopover, a contingent including the Mayor of Itajaí Mr. Volnei Morastoni, and the Environmental Secretary of FAMAI Victor Silvestre, visited the Race Village.

“We visited Auckland stopover to learn about best practice in recycling from the Race and Auckland City Council. After our visit, we were inspired to join the (Clean Seas) campaign and begin to develop a blueprint to tackle the problem of plastic being sent to landfill and entering the oceans through our network of rivers.”

Victor Silvestre, Environmental Secretary of FAMAI.

The City consequently became the first in Brazil to formally partner with Clean Seas and have so far encouraged 11 other cities in their region of Santa Catarina to do the same.



Newport

Race Village waste



Waste management in Newport was overseen by our volunteer Sustainability Committee in the planning phase and the committee also provided onsite supervision, supported by a team of 35 Green Team volunteers.

Special effort was put into the pre-event period waste generation and segregation. A higher proportion of waste was recovered for recycling during this period (67%) than during the event days (47%).

In total 19.1 tonne of waste was generated with 52.9% diverted from landfill, either recycled (21.4%) composted (15.6%) or mulched (15.9% - wood waste). The water refill stations reduced the total waste by an estimated 250 kg of single-use plastic. The total plastic footprint was 1 tonne, with an estimated additional 20% lost to landfill.

An excellent knowledge sharing experience happened at the Newport stopover with Gothenburg Recycling Partner and race Sustainability Partner Stena Recycling, visiting with the Newport stopover's event waste company. Valuable information was exchanged on the types and volumes of waste to expect.



Photo: Jesús Renedo/Volvo Ocean Race

Lessons learned: Considering that almost all waste created during the event days front of house can either be recycled or composted, significant back of house general waste was either being generated or incorrectly segregated.

It is recommended that resource recovery and an onsite segregation service for back of house/production waste be in place at the site to ensure maximum recovery of materials lost to landfill due to production personnel's inattention.

Cardiff

Race Village waste



Our Cardiff stopover partners, City of Cardiff and Cardiff Harbour Authority, fully embraced our ambition to have excellent resource recovery.

A total of 28.2 tonne of waste was generated with 80.1% recovered for recycling or composting.

Almost 1.5 tonne of single-use plastic bottles were avoided through our water refill points. A special focus on soft plastic recovery resulted in the collection of 280 kg.

Recyclable material was collected and separated onsite at the event, and the residual waste was sent to a 'dirty' materials recovery facility (MRF) where a further 60% of recyclable materials were recovered from the mixed waste stream. This is different from other 'clean' MRFs whereby only pre-sorted recycling is delivered and non-recyclable material is extracted.

Sending our mixed 'general' waste to a 'dirty MRF' is always preferable as it optimises the amount of recyclable material from being recovered. In all, it is estimated our total plastic footprint for Cardiff was 2 tonne.

Our stopover partners invested in new bin signage and display stands, added a compost and film plastic stream, and the waste company engaged were highly responsive and motivated to achieve excellent results. When it was apparent that we were receiving some contamination through the bins, they instigated an onsite sorting station back of house to decontaminate and re-sort materials to have the cleanest waste streams possible.



Photo: Jesús Renedo/Volvo Ocean Race

This dedication by our delivery partners and the cleaning team meant that the Cardiff stopover was one of the highest performing in terms of resource recovery and diversion from landfill. An excellent and satisfying result!

What is more, the team is now committed to having these systems at their events going forwards.

Gothenburg

Race Village waste



Photo: Jesús Renedo/Volvo Ocean Race

Our Sustainability Partner for the Race, Stena Recycling, who are based in Sweden, also supported the Gothenburg stopover through a recycling partnership. Stena Recycling handled all waste resource management.

In total there were 16 fractions of materials being sorted with six available to visitors front of house. Plastic, wood, paper, food waste, PANT and 'other' were those available to visitors.

A total of 23.6 tonne of waste was generated. Of this 32.5% was recycled, 6.5% (food waste) was sent to biogas, 14% was timber incinerated for energy and 47% of mixed general waste was also sent to the waste to energy facility. Almost 300 kg of single-use plastic bottles were avoided through our water refill points.

Stena Recycling provided waste infrastructure both back and front of house. Single stream materials separation was in place, including metal, paper, glass, food, wood, plastic and PANT (bottles & cans).

To help visitors sort correctly, there were volunteers and hosts from Stena Recycling. The disposable paper/card serviceware were collected as 'paper' and sent for recycling rather than composting.

Special attention was also given to electronic waste collection and hazardous waste from the Boatyard.

Lessons learned: The consistency in branding of the bins and beautifully turned out cleaning staff, including their bikes and trikes (pictured) showed that we cared about resource recovery. This respect for 'waste' resources and a realisation of their value is something that we wish to push through all future onsite waste systems at our Race Villages.

Whilst every effort was made, still contamination occurred which could be rectified by having onsite sorting especially for food waste and general waste.

The Hague

Race Village waste



Photo: Pedro Martínez/Volvo Ocean Race

In The Hague we had a triple bin system, which separated general waste, from mixed recycling and then plastic separately. In addition to these were wooden bins for compostable waste, which was all food packaging, plant plastic beer cups and food waste.

A total of 36 tonne waste with only 12.6% recycled. An additional 22% of compostable material was collected for composting. The remaining waste was sent to incineration to a waste to energy facility.

This is a disappointing result as many materials were sent for energy recovery rather than recycling, which is a preferable option.

A large proportion of recyclable or compostable materials were also lost to the general waste bins because of incorrect bin sign messaging. The triple set of bins were not placed adjacent to the compostable waste collection bins, and visitors used the closest bin to them regardless of what they were meant for.

To counteract these challenges, additional signs were and instigated a back of house waste separation phase to decontaminate bin bags before sending for onward processing.

PLA cups were used by the bars and this caused confusion and a contamination problem for both the recycling and composting bins. As the PLA (cornstarch) looks like plastic many people confused them and placed them in the recycling bins.

To decontaminate the PLA cups from the recycling and to extract any recyclable from the compost bins, we put a back of house sorting system in place to try to recover some materials incorrectly placed by attendees and production staff.

Lessons learned: At future events PLA cups will not be permitted, and reusable cups will instead be encouraged or required. Future waste management and resource recovery efforts must be done in close consultation with the cleaning contractor and experienced event waste planning staff. A back of house system for pre-sorting should be in place from the outset, including the build-period where a lot of resources were lost to landfill/incineration.

Branding recovery

A huge amount of branding is used in our Race Villages, by ourselves and also our stakeholders. Branding of the Race Village is 50% locally produced (with the Host City's partners and logos) and 50% is touring.

PVC was strongly advised against and the majority of our stopover partners were able to produce their flags, banners and other branding without PVC. A large amount of stickering, to cover flat boards and marquees was used however, and this is unfortunately PVC in most cases.

We re-used our branding six times, with two sets touring each of our routes. At the end of our routes (Gothenburg and The Hague) the material was collected.

At many stopovers, the local branding was donated for repurposing into other items. Obviously there were controls over the disclosure of logos, but this was managed.

An estimated 2 tonne of branding material was collected for salvage or repurposing.

In Lisbon branding was packed down onto pallets of each material type and then re-purposing groups were invited to collect the material to make into such items as bags and boat shoes!

There is no textile recycling currently in Sweden, and so a large amount of branding was collected and sent for repurposing to local community sewing organisation Tråd och Trade. The remaining branding was sent to energy from waste recovery, which is standard waste management practice in Sweden.

In The Hague, the flags and other branding items were sought after by fans and designers wanting unique materials to produce secondary items from. After the stopover a 'pick up' day was arranged to donate flags and banners to fans. All other material was sent to recycling or energy recovery. [Watch the video](#) | [Read the story](#).

The previous edition Boatyard marquee has also been sent for repurposing into bags with [Garbags](#) in Lisbon, and also some was used to provide waterproofing for a community organisation's building.



Lessons learned: There is still a long way to go to responsibly produce and plan end of life of 'single-use' branding, particularly that produced for each stopover as it can't be re-used. Materials used by our sponsors and installations are also often bespoke, and more work needs to be done in material selection and end-of-life planning.

As we toured the world, we noticed significant differences in the sourcing options and disposal options for each destination. In some locations it was extremely difficult to find PVC-free branding material at a reasonable cost.

We hope that the availability of options increases, that the costs become more accessible, and that the future brings new material innovations.

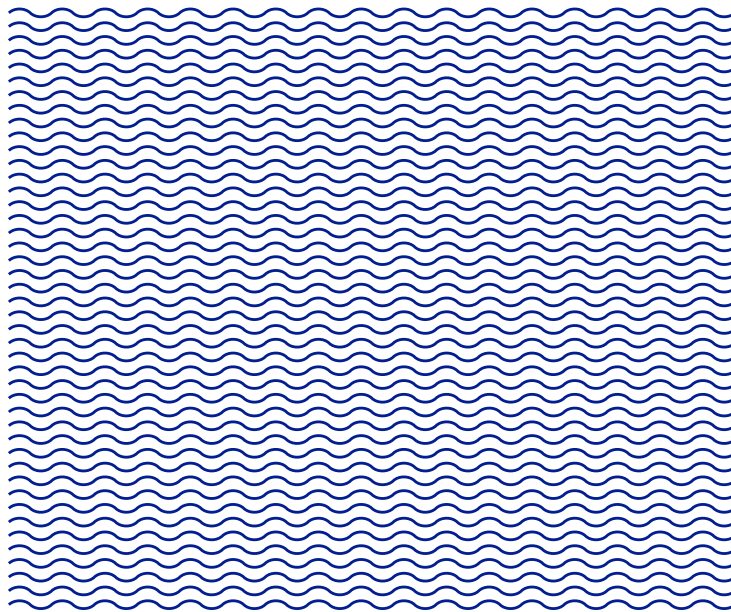




Photo: Pedro Martínez/Volvo Ocean Race

We noticed that those who plan and purchase the branding for our Race Villages did not have the remit to consider the end of life or to have stewardship over the branding materials. We will require this connection between resource use and responsible end-of-life management to be included in all future work agreements.

There also needs to be more engagement and capacity building with those that plan and purchase the branding, on materials types. We had an awful situation at one stopover where the claim 'We are a PVC free Race Village' was printed on an enormous branding tower made from PVC!

Where material sourcing failed, we noticed that enough time had not been given to do rigorous sourcing of PVC free alternatives.

PVC stickering is also a challenge. We hope that material alternatives become available, and in decommissioning installations we will work hard to ensure that materials are collected and recovered for recycling.

The challenge of branding material choice and matching with the optimal end-of-life processing to feed a circular economy, is one that all events face. We will continue to look for innovations in our sector and in branding materials so that we can plan for much less resource-intensive branding overlay for future editions of the Race.

Race boat waste

The race boat's waste during each route consists primarily of food packaging. We undertook audits of race boat waste contents across various legs and the average waste was between 0.8 kg and 1.15 kg per day.

Very little of the waste is actually recyclable. By weight almost half of the waste was foil lined plastic food pouches (from freeze dried food) which could not be recycled. For those teams that purchased their freeze dried food in bulk and then decanted into plastic pouches, the pouches were not recyclable as they were food soiled soft plastic. In many destinations all boat waste is confiscated for quarantine reasons and we are therefore not able to collect for auditing and recycling.



Photo: Sam Greenfield/Volvo Ocean Race

Office waste

At every stopover we had offices set up for production staff, along with a media centre, used by teams, partners' communications teams, and external media.

In each of these segregated waste systems were set up to ensure we had good materials recovery in the offices as well as out in the Race Village.

Compliance was sometimes not as good as we would hope, but we relentlessly monitored and corrected, encouraged and admonished staff until, by the end of the race, we were almost perfect!



Photo: Ainhoa Sánchez/Volvo Ocean Race



Photo: Pedro Martínez/Volvo Ocean Race

Food salvage and donation

Leftover, high quality fresh food from the Volvo Pavilion and Sailors Terrace kitchens were donated after each stopover.

Our caterer in the Volvo Pavilion and Sailors Terrace, One, and their staff were highly engaged and supportive of the food donation programme.

On the day before the last of each stopover, an estimate of the food that would be left over was calculated. Then on the final day it was all transitioned into one coolroom. On the morning after the Race Village closed the charity would then come and collect the food.

In Auckland, food was donated to Kiwi Harvest, an organisation that collects food from events, hotels and restaurants and redistributes it to local charities and shelters.

In Itajaí, the food was donated to our recycling cooperative partner COOPERFOZ. They make meals each day for their workforce. Food was all distributed amongst the local community and families of the workers at COOPERFOZ. They made a magnificent cake amongst other things!



Photo: Pedro Martínez/Volvo Ocean Race

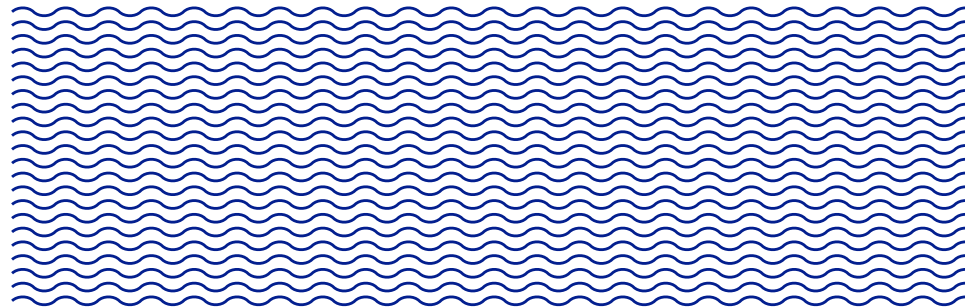
In Cardiff, left over high quality produce and dry goods from Volvo Pavilion and Sailors Terrace kitchens were donated to the Huggard Day Centre which provides charity meals to people in need.

In Gothenburg, Göteborgs Räddningsmission were contacted, who accept food donations for use in their kitchens and accommodation which cater for people who can't afford their own food. A positive outcome of the donated food was that it was a lot of canned food and spices that could be sold in Räddningsmissionen's new supermarket for people with low income.

At The Hague stopover, leftover fresh produce and ingredients from Volvo Pavilion and Sailors Terrace catering kitchens was donated to charity. Voedselbanken Nederland (Foodbank Netherlands) is an organisation specialising in providing food to those in need in the region. They were delighted to receive three pallets worth of very high quality food for their organisation.

3 tonne

of high quality food was donated to charity



Compostable resources

Case Study



Photo: Pedro Martínez/Volvo Ocean Race

29.8 tonne

total compostable waste recovered



Photo: Pedro Martínez/Volvo Ocean Race

To get off single-use plastic in public food service and in crew and corporate hospitality, if providers were unable to offer reusable crockery and cutlery, we encouraged them to supply compostable serveware. Consequently, compostable waste collection was necessary.

This was successfully implemented 'front of house' for the public, in our crew and volunteer catering tents for 'plate scrapings' and by onsite catering kitchens 'back of house'.

Dedicated bins were in place and compostable resources were either managed by the existing waste contractor or a specialist processor was contracted.

Back of house compost collection was put in place for the first time in Alicante and Lisbon, focussing primarily on catering waste from the Volvo Pavilion and Sailors Terrace. An estimated 1.5 tonne of food waste was collected from the Alicante Race Village.

In Lisbon we additionally had compostable waste collection front of house for the public and our Green Team volunteers were placed at the resource collection stations to help visitors put the right thing in the right bin. Despite some contamination and confusion issues with this new initiative, we successfully collected 3.4 tonne of compostable waste.

In Cape Town our caterers at Volvo Pavilion and Sailors Terrace successfully collected food waste for composting. Unfortunately the effort put into the collection of compostable waste was not followed through to composting by the waste contractor. Whilst a composting service was promised by the venue, all compost was lost to landfill. It is not clear why this occurred.

In Hong Kong a huge effort was put into collecting compostable waste from the public food court area and back of house from Volvo Pavilion and Sailors Terrace. A total of 3.5 tonne of food waste and compostable serveware was collected and sent for composting with a dedicated service who collected directly from the Race Village.

Food trucks in Hong Kong changed every day and it was extremely difficult to communicate with each one to ensure they brought no plastic to the site. After our allocation of washable plates were exhausted, we supplied bagasse serveware and timber cutlery.

In Auckland, the event waste company contracted did an exceptional job in both bin design and distribution, and in ensuring little contamination by having a back of house 'waste triage'. There was little public catering onsite (only two captive-audience bars) but they, Volvo Pavilion and the Sailors Terrace together collected 5.7 tonne of compostable waste across the month-long stopover.

We conducted waste audits in Auckland and found that between 3 and 10% of material placed in the general (landfill) waste and recycling (mixed) bins was actually compostable (food and packaging.) Interestingly, because of the density of food waste, 50% of the overall weight placed in general waste bins by the public was actually food waste. This was lost to landfill as we were not able to extract the food waste by hand.

The Packaging Forum and WasteMiNZ have a focus on the challenge of plastic-lined coffee cups at the moment. We wanted compostable food packaging collected into our compost bins, however so many people were walking a variety of coffee cups through the Race Village from outside, we had a challenge in getting the right coffee cups in the right bin. We attached coffee cups to our compost bins in an attempt to remind people to think about whether their cups were compostable (not plastic-lined) before disposing of them into the compost bin.

We conducted a waste audit which revealed 27 types of coffee cups, many of which were plastic-lined. The non-compostable cups were extracted from the compost bins and the compostable cups in recycling and general waste bins were transferred to the compost bins through our back of house sorting station.



Photo: Jesús Renedo/Volvo Ocean Race

In Newport we had a comprehensive food waste and compostable serveware collection programme both back of house and in the public realm. All serveware was compostable, and our volunteer Green Team (pictured) came up with their own creative way of driving the point home to visitors that the plates were compostable! The crew caterer, public food stalls, Ocean Club caterer, along with the Volvo Pavilion and Sailors Terrace, all actively contributed to the compost collection. Whilst there was some contamination, the materials were not rejected and we successfully collected 2.99 tonne of compostable waste.

Cardiff stopover was a real success story when it comes to our compost waste focus. They had previously not done any compostable serveware or food waste collection at other events and made a huge effort to bring this into their standard operating procedures for future events. The Cardiff Harbour Authority along with their event waste contractor designed new bin stations and signs and committed to excellent onsite processes, including a back of house triage once it became apparent that contamination was unavoidable. A total of 3.18 tonne of compostable waste was collected.



Photo: Jesús Renedo/Volvo Ocean Race

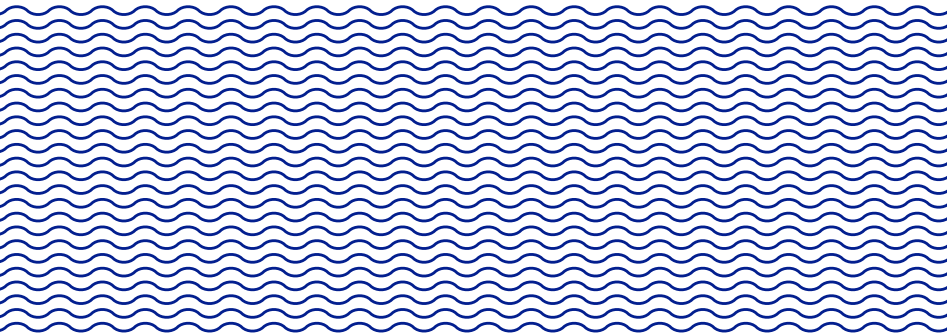




Photo: Jesús Renedo/Volvo Ocean Race

Gothenburg stopover had our sustainability partner Stena Recycling as the resource recovery partner, and a detailed six fraction system was in place front of house to include food waste. A total of 4.3 tonne of compostable waste was collected however one third of it (2.82 tonne) was rejected. So in all 1.53 tonne of compostable waste was sent for composting.



Photo: Jesús Renedo/Volvo Ocean Race

The food stallholders were very engaged and even set up their own waste segregation system. In the crew catering the caterer was also extremely engaged and diligent in ensuring excellent segregation of compostable waste.

The problem with food and other organic waste being lost from composting however was due to production staff and cleaners placing food waste into plastic bags and placing these into the compacting skip, rendering the material unfit to be accepted for processing. A disappointing loss due entirely to avoidable human error. It was realised too late that this had occurred.

This is something that is observed at most events and the lesson for us, as with all waste management at events, is that it is important that constant quality control is in place for materials handling not only front of house, but within the production crew and cleaning staff. At future events we will factor in having quality assurance personnel as part of the onsite cleaning crews to ensure valuable resources are not lost through mishandling.

In The Hague compostable waste (food packaging and left-over food) was planned for collection in timber bins, located in the food court area. The bin signs only had 'food' written on them and no mention of the plates and cutlery. However, as no other bins were placed next to them for other waste streams, they actually worked in collecting mostly compostable waste as only compostable items were provided for food and beverage service. To assist in reducing contamination rates, a sorting station was also installed back-of-house to extract non-compostables.

Food packaging was reduced in The Hague (pictured), including only serviettes provided for hamburgers, which helped to considerably reduce the volume of disposable packaging waste, regardless of its material type.

In Guangzhou and Itajaí no compost waste collection was undertaken as services were not available for processing. In Melbourne compostable waste was treated as part of the local waste management system which is a 'mechanical biological treatment' facility.



Photo: Pedro Martínez/Volvo Ocean Race

Teams



Photo: Jesús Renedo/Volvo Ocean Race

Vestas 11th Hour Racing and Turn the Tide on Plastic Race teams both actively participated in compost waste separation where services were available on shore at their team bases.

Crew catering

Crew catering had wins and losses in successful capture of food waste for composting. If there was an absolute no plastic, metal or other non-compostable item in the crew catering hall, then it was a pretty straight forward mission to get only compostables in the compost bin!

However in many locations the crew caterers insisted on providing butter in disposal plastic packets or foil wraps! But on the whole, once a flawless system was put in place, and importantly, once the staff of the caterer were convinced to participate, then most crew were happy to participate in recovering food waste resources for composting!

Lesson learned: We would much prefer crew and volunteer catering to be with re-usable crockery, cutlery and cups. In most stopovers this was the case, however in Gothenburg they chose to use disposable, albeit, compostable plates. The potentially avoidable volume of waste was significant, and we will insist that in future all crew and volunteer catering be on washables and not disposables.

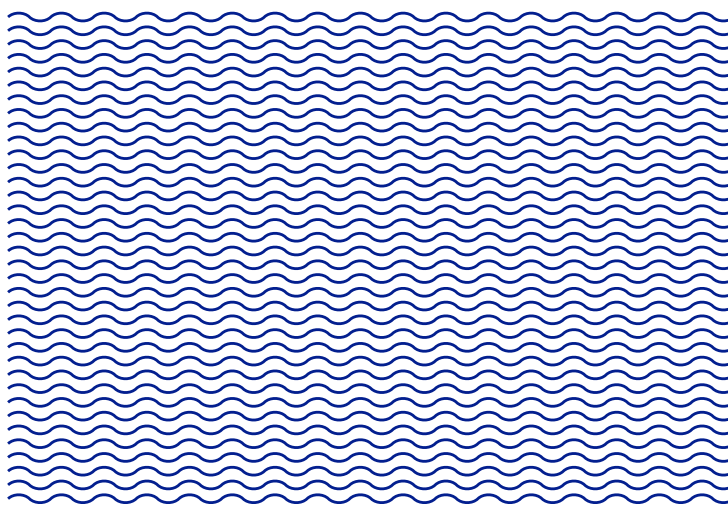
Coffee cups was a particularly troublesome one. We will insist no disposable coffee cups are provided and that all staff must bring their own reusable cups if they wish to take coffee or tea back to their work site from crew catering.



Photo: Jesús Renedo/Volvo Ocean Race



Photo: Jesús Renedo/Volvo Ocean Race



Catering contractor

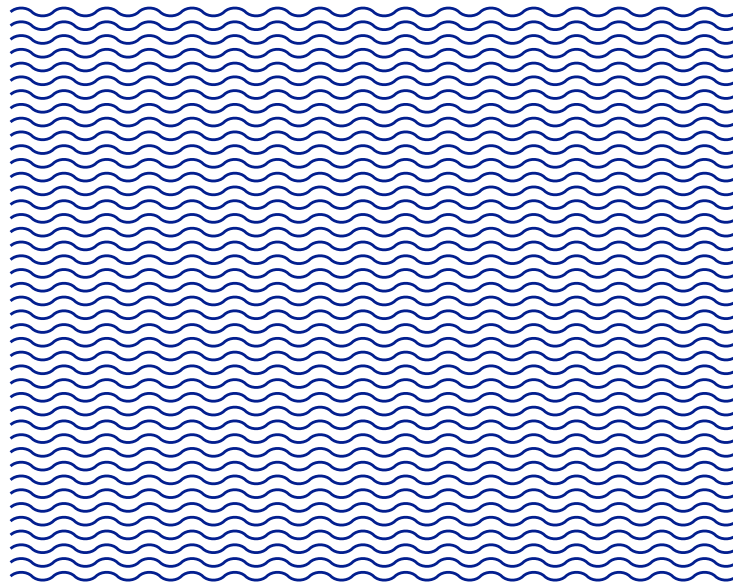
Our global caterer, One Event Management, who provided catering for Volvo Pavilion, Sailors Terrace and many sponsors and teams, fully embraced the composting collection programme.

Their enthusiasm for the project and compliance by staff grew as we moved from stopover to stopover. There were always new local staff to engage into the system and some training and segregation intervention was required, however overall the experience was very positive.

As a company they have been inspired to adopt improved sustainable operations within their company which is a rewarding legacy for us.

“I have found the whole sustainability experience with VOR educational and inspirational. I am proud of what actions and procedures we put into place throughout the race and how some of these have permeated into our standard working practices and also into our personal lives.”

Rob Colgate, Absolute Taste.



Offices

A challenge in getting compost separation right, surprisingly was in the crew catering, media centre and production offices. We believe this was due to the large number of different people, and the speed and pressure of work. When it did work it was in cases where the system was so simple that there was no contraband to disrupt the system, and cleaners and caterers were supportive of the system.

Where this wasn't the case, the contracted cleaners for offices and the kitchen staff in catering operations were difficult to inspire to adhere to our segregation systems. We believe this is due to a conflict in procedures, in that these teams have their standard ways of operating which may not comply with the segregation systems we require. The lesson going forward is to put strict expectations within contracts with cleaners and caterers and to have someone within their teams responsible for ensuring compliance.



Photo: Jesús Renedo/Volvo Ocean Race

Plastic leaks

Case Study



Photo: Pedro Martínez/Volvo Ocean Race

Despite a huge effort in engaging all those who could help to avoid single-use plastic in our food and beverage service, we still saw some disposable plastic making its way into our Race Villages.

Where we saw plastic appear and could intervene immediately we did so (such as requesting straws be removed). In a few cases we had to tolerate some disposable plastic items.

This was generally through those that we had no contractual arrangements with (such as permanent vendors) or that were not able to be engaged with the idea of going plastic-free well enough.

Some of the plastic leaks we encountered included:

- ◆ Plastic cutlery, food containers, stirrers, ice cream spoons and straws used by some vendors.
- ◆ Plastic food containers provided by offsite caterers for our on-water staff lunches.
- ◆ Plastic-bottled water sold by food vendors, provided to hospitality guests or used by workforce.
- ◆ Disposable plastic items (frisbees, bags, yoyos, rulers) given away.
- ◆ Disposable plastic-lined coffee cups used by some vendors and brought onsite by workforce.

Communications

Many lessons were learnt about need to check and double check that the message about avoiding single-use plastic was being transmitted, understood and received! Where there were 'plastic bloopers' these mainly occurred where there was a communications block between the person organising the catering or activation, the delivery partner and ourselves.

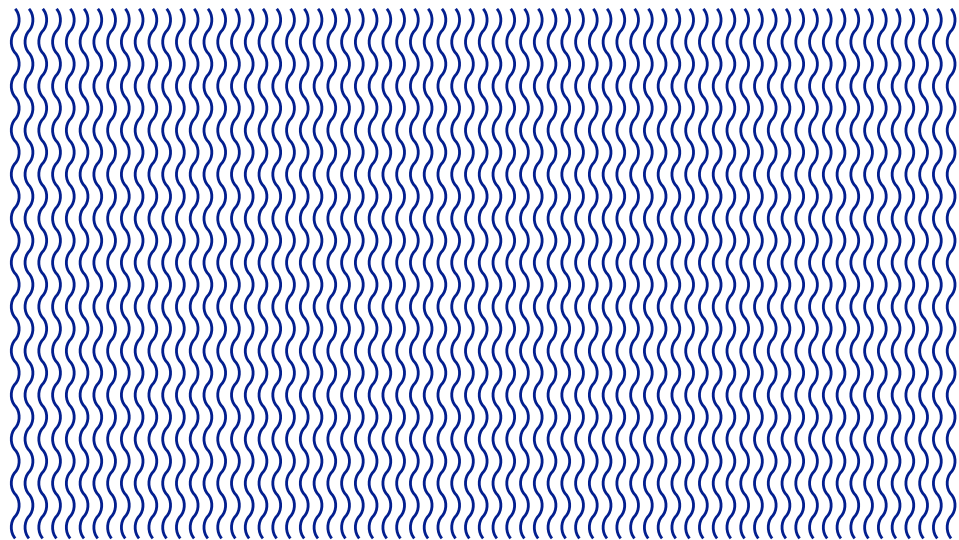
The huge disposable plastic trays that appeared in one of our volunteer crew catering kitchens were probably one of most eye-watering plastic contraband! The manager of catering for the Volunteer Centre in that instance was a different person to the one who arranged the rest of the onsite catering. The plastic-elimination message was not conveyed through to Volunteer Centre management and sadly the plastic trays, pre-packed plastic cutlery in plastic bags, single-serve sachets, stirrers, coffee pods and drinks in plastic bottles were served.

A similar situation was seen in some of the Media Centres with single-use plastic sachets and coffee pods making an appearance.

In one stopover a snack machine full of single-use plastic-bottled drinks, and a coffee machine with small plastic cups was set up in a portable building in the office/media/TV compound for back of house staff to use.

Our biggest plastic problem was the use of an estimated 50,000 styrofoam food trays and burger clams. We pre-approved a compostable material and then it was swapped for foam at the last moment. Unfortunately there was no understanding that styrofoam was made from plastic, and therefore the material was okayed despite our preemptive efforts. We were very surprised at this, so we surveyed 500 people in the Race Village and 60% said that the foam food containers either were not plastic or they did not know if they were plastic!

Lessons learned: Contract it in, remember the details, look for traders that could fall through the communications cracks and ensure all third party caterers, such as those contracted on behalf of sponsors by their activation agencies, are briefed. Follow up and fix it in real time! Don't assume people know that polystyrene is, in fact, plastic.



Single-serve condiments

The ideal is for sauces and condiments to be available in bulk, either on tables, on counters or the sauce put on by staff pre-service.

Food service rules however may mean that sauces can't be placed in bulk bottles on counters for people to use themselves. In that case the server can place sauce on the meal before handing it to the customer.

Single-serve sachets appeared in several instances, both in public and crew catering. However, in one stopover, whilst there were many single-serve sauces in plastic sachets, some vendors worked around the health and food service rule of no bulk sauce dispensing, by keeping the sauces on the kitchen side of the counter.

In another stopover a great solution to stop cross contamination and food health service concerns was to have 'hanging' bottles which were kept clean and sanitised by serving staff.

Butter and milk

We also encountered single-serve plastic milk, as well as single-serve foil/paper wrapped butter. These corrupted our well planned compostable food service-ware segregation, contaminating our hard fought compost collection!

Lesson learned: Work with stopover food and beverage management to ensure all traders and caterers devise an acceptable way of providing condiments, milk and butter that does not require single-serve packaging.

Ice cream containers

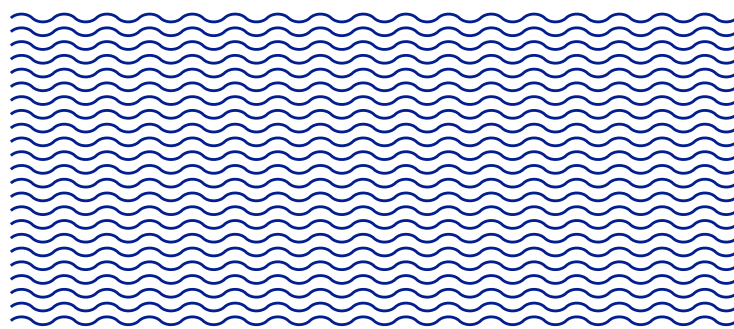
In some stopovers ice cream cups and spoons were completely plastic, and these were unable to be changed. In other stopovers ice cream was served with plastic spoons and in plastic-lined cardboard cups, and in many stopovers pre-packaged ice creams were served in plastic wrappers, also unable to be recycled.

Lesson learned: Ensure ice cream is served plastic free - only allow cones, or fully compostable or recyclable containers (not plastic) and only spoons/spades made from wood. Require vendors to submit details in advance, and sign off on their packaging.

Coffee pods

We had single-use disposable foil and plastic coffee pods being used in crew, team and hospitality catering. Whilst convenient for coffee service, coffee pods are an awfully wasteful and high-energy option.

DongFeng race team committed to no coffee pods. The team bought a traditional espresso coffee machine that utilises loose coffee beans instead of coffee contained in capsules. All coffee leftovers were therefore compostable, and these were emptied into the Race Village compost bins.



Coffee cups and plastic stirrers

Disposable coffee cups were a constant challenge at so many of our stopovers. Coffee cups are either cardboard with plastic lining (no good for our compost bins) or compostable (great, but not if they are served with plastic stirrers as they were by the operator at one of our stopovers).

Some hospitality caterers at various stopovers, and even for our crew and volunteer catering, provided plastic-lined coffee cups.

Whilst stirrers might be a minor infraction in terms of volume, they will render a compost bin full of diligently separated compostable waste contaminated and fit only for landfill.

Lesson learned: Contract and control coffee vendors and coffee service. Remember that coffee stations can pop up within alcohol bars (as pictured), as part of a complimentary hospitality service in sponsor activations, and in production offices, crew and volunteer catering or the media centre.

Plastic straws

We had a few straw-related infractions, but almost all were able to be remedied by taking the straws out of service as soon as they were identified. One that couldn't be changed was a special narrow straw designed to fit the hole in the glass - the drink was a signature item on the bar's menu! This was the work of the mixologist that designed the bar menu, who had been contracted by an activation agency, who in turn had been contracted by the local sponsor. When asked about how the straws made it to the bar, the mixologist said he was unaware of the plastic-free requirement and that he had beautiful reusable steel straws he could have used if only he had known.

Another straw related challenge, was when a bar decided they needed straws, and sourced PLA (cornstarch) straws. These straws look like plastic, as do all PLA items, and cause huge problems for waste management - they either have to be hand-picked out of recycling bins, or they contaminate the compost as many composting facilities don't accept PLA. In this particular situation we had so many complaints - many people marching over to the Turn the Tide on Plastic team base to directly complain - that the bar management relented and removed all straws.

Plastic cups

We hoped it would be not the case, but some disposable plastic cups made an appearance through the bars in the Race Village. The bar staff just couldn't stop themselves from accessing plastic cups that 'happened' to be in storage at the bar. On the whole we were very happy with the adoption of a reusable cup system for most bars, but we still had some plastic cup incidents.

Plastic cutlery

In some cases plastic cutlery made a momentary appearance. This was usually when the trader had run out of wooden cutlery and had to revert to whatever they had under their counter.

Lessons learned: Have a stash of wooden cutlery available to give to traders who run out!

Plastic bottles - water and soda

In a few locations we had traders that insisted on selling bottled water in plastic, and other beverages in plastic too. We also had plastic-lined coffee cups, and pre-packaged plastic cups of water with peel off tops!

We also saw plenty of our event staff, including all of the security companies and most production contractors, using plastic disposable bottled water.

Lessons learned: Contract the requirement to not sell, serve or use water or other beverages in any type of disposal plastic container.

Have the food and beverage manager signs off on proposed items for sale and packaging to be used. Make sure there is enough time for the food and beverage manager to adequately engage with the traders and that they have the time and authority onsite to audit and insist on changes. In those locations where we had most trouble, there were unclear lines of communication on what was previously signed off or agreed as OK.

Require that all those working onsite do not use single-use plastic bottled water. Enforce this for all sub-contractors that supply event staff, and make it very clear to all staff working on stalls and other stands or installations that they must not bring plastic bottled water onsite.

Sneaking plastic in from outside!

We also found plenty of instances of local or touring participants feeding their event staff from offsite take-away food service outlets. Many times this was delivered in polystyrene which corrupted our waste management system.

This included the bulk supply of food packaged meals, or just single purchases by individual staff who went offsite to get their lunch.

Lessons learned: Enforcing no plastic packaging in situations like this will probably be an almost impossible one to police. Our best option will be to identify the various groups that are likely to buy large volumes of meals (those with a big event staff) and make it more financially attractive for them to participate in crew catering than purchasing outside and bringing plastic packaging into the Race Village.

We can also appeal to individual's sense of participating in our mission to try and dissuade them from purchasing plastic-wrapped food.

Permanent vendors

Another challenge was those vendors who are permanently onsite within the Race Village space or immediately adjacent to it. Pictured is one vendor that had their usual polystyrene cups in use while also having the event's reusable cup system. They almost got there! Convincing the beach bars in The Hague to go without straws was an impossible mission once the event was in full swing.

Lessons learned: Engage the commitment of permanent vendors to join us on our plastic-free missions. Work with local governments that license venues in proximity to waterways to prohibit the use of disposable plastic straws and cutlery.

Crew catering - takeaways

Most crew catering was 'eat in' however some of our staff required to-go meals, especially on race days for those working on the water.

On several occasions these meals were provided in plastic containers and with plastic cutlery. This was usually because the in-house crew caterer had not planned in alternatives. In one situation an external caterer, who provided no other meals to the event and was contracted only for crew catering on the water, had not been briefed to be plastic-free.

Merchandise and giveaways

Single-use plastic disposable merchandise and fan paraphernalia were disappointing to see. We had not included a ban on such items in the original contracts and so we could only influence the activation decisions made by promotional companies.

In most cases the activation was done by an agency and there were several layers of people between our message and the person who would have eventually designed the activation or ordered in the giveaways.

We saw items such as blow-up clappers, yoyos, plastic-wrapped fans, and plastic backpacks full of plastic-wrapped giveaways.

We also observed clappers made from high gloss plastic-coated cardboard given out to fans, which are not recyclable and are throwaway items.

Snack packs for guests on board or in RIBs are a great thing, however we witnessed some excessively plastic-wrapped items on some occasions. A plastic-wrapped apple was particularly galling!

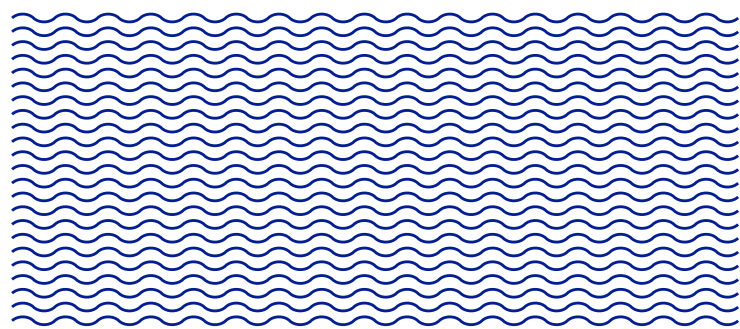
Lessons learned: Put strict controls within contracts regarding what is acceptable for giveaways.

Have all brands that activate onsite submit their proposed giveaways and take-away catering provision for approval.

Require the stopover sponsorship manager to provide updates and a report on the proposed items to allow for final sign off by us.

Ensure someone within client services at each stopover is auditing the giveaways and has the power to intervene if non-compliance is in evidence.

Congratulations Cardiff!! Who were the only stopover to have not a single plastic infraction!!



Science Programme

Case Study



Photo: Jeremie Lecaudey/Volvo Ocean Race

Highlights

30

scientific drifter buoys successfully deployed

25,82

one minute averages of oceanographic measurements recorded

86

areas sampled for microplastic

The Race's Science Programme brought together an elite scientific consortium to capture data that will contribute to a better understanding of the world's ocean and climate.

The programme was supported by Volvo Cars who are donating €100 to the programme from every V90 Cross Country Volvo Ocean Race series car sold.

Environmental and oceanographic data from onboard sampling, scientific drifter buoys and meteorological measurements contributed a vast amount of data especially from critical data-sparse areas to improve the reliability of forecasts and predictive models.

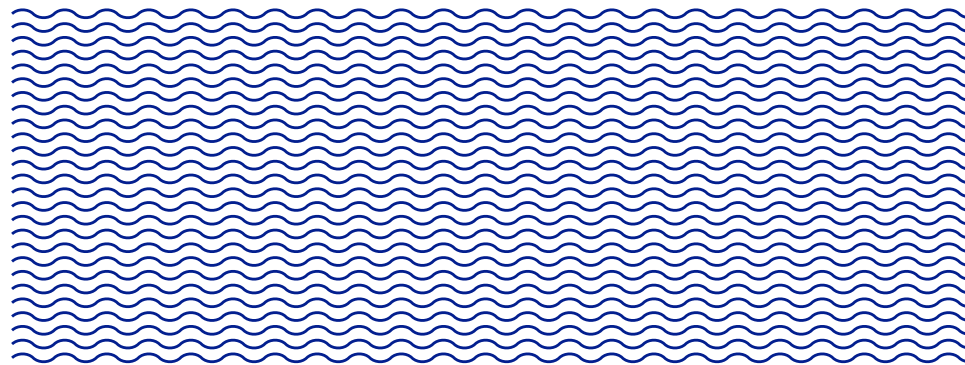




Photo: Jesús Renedo/Volvo Ocean Race

Dr Sören Gutekunst, (left) of GEOMAR Institute for Ocean Research, funded by the Cluster of Excellence Future Ocean, analysed the preliminary microplastics data at their laboratory in Kiel, Germany. He is pictured here with Dr Stefan Raimund (SubCtech GmbH) fitting the equipment into the AkzoNobel race boat in Auckland. The same equipment was on Turn the Tide on Plastic since Race start.

The Science Programme targeted gaps in existing knowledge about our ocean environment and used the race's often remote route to capture data needed to help fill these gaps.

The significance of the gaps we filled:

- ◇ **Most measurements of meteorological and oceanographic variables in the open ocean are derived from remote sensing via satellites. Direct measurements provide a reference to validate remotely-sensed data and correct imperfections. This validation increases the accuracy and reliability of forecasting systems, climate predictions and climate change studies, to yield a better scientific understanding of the state of our Ocean's Health.**
- ◇ **Scientists are currently able to account for just 1% of the plastic that enters our ocean on an annual basis. That is – for every kilogram of plastic that enters the ocean we know where 10 grams of it is. Compounding this lack of knowledge and research, the study of ocean microplastic pollution lacks a globally recognised protocol for data collection and destination and standard for data. The programme pioneered a method of data collection and analyses with the view to setting a benchmark for microplastics research and instrumentation.**

Onboard sampling

The OceanPack™ RACE developed by SubCtech was installed onboard Turn the Tide on Plastic (all race legs) and Team AkzoNobel (from Auckland). This was combined with ex-situ analyses of microplastic particles in the GEOMAR laboratory in Kiel using a system developed by bbe Moldaenke (a combination of RAMAN spectroscopy and a holographic camera).

- ◆ **The following data were captured:**
- ◆ Microplastic particle concentrations
 - ◆ Partial pressure of carbon dioxide
 - ◆ Sea Surface Temperature
 - ◆ Sea Surface Salinity
 - ◆ Chlorophyll a
 - ◆ pH (by derivation)
 - ◆ Latitude | Longitude
 - ◆ Time

The oceanographic data:

- will fill significant gaps in the Surface Ocean CO2 Atlas (SOCAT) and from there will be available to scientists for modelling purposes.
- will be submitted to the Coriolis data centre and to the Surface Ocean data centre (GOSUD).
- have been shared to NOAA's National Centres for Environmental Information (NCEI) database where the dataset also provides metadata to support the microplastic dataset.



Photo: James Blake/Volvo Ocean Race

Microplastics data

The microplastic research was an exciting collaboration with GEOMAR Helmholtz Centre for Ocean Research, Kiel. [Read here](#) and [watch our video](#) to learn more about the collaborative research and its objectives.

The microplastics data:

- continue to be analysed for peer-reviewed publication
- have been shared to [NOAA's National Centers](#) for Environmental Information (NCEI) database
- will be incorporated into [EMODnet](#) microplastics data portal (currently in development)

The preliminary results have highlighted the extent of microplastic pollution in our ocean.

The dataset provides for the first time an internally consistent picture of microplastic distribution in the world's oceans.

Microplastics were found in 93% of samples collected along the route by both boats, including those taken from close to Point Nemo in the South Pacific, the most remote location in the world's ocean. [Read more](#).

The highest microplastics concentration was recorded in the waters of the South China Sea where the level was 349 particles/m³. An adjacent sample from the north Philippine Sea, east of Taiwan, also had a relatively high level of 243 particles/m³.

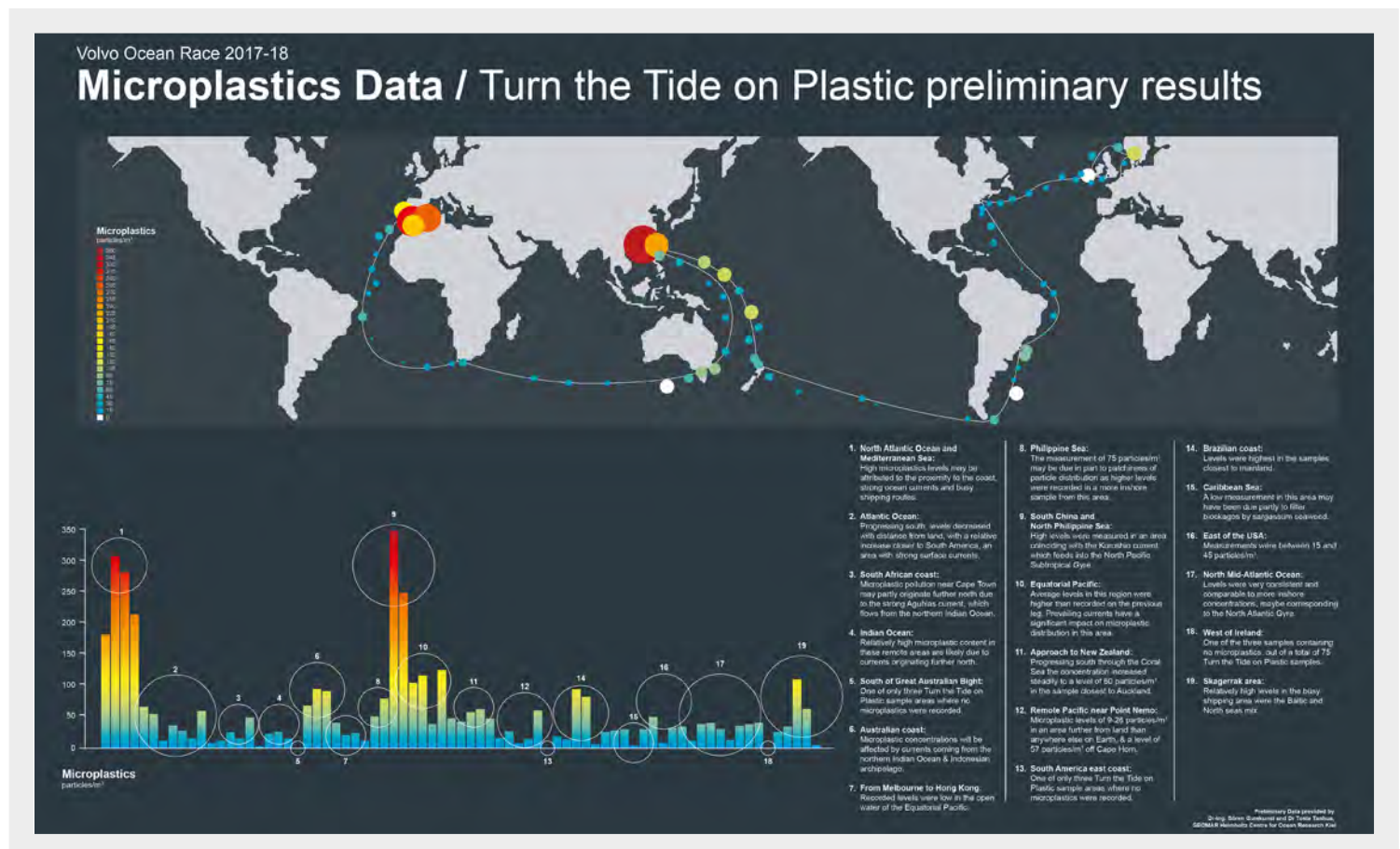
North European waters showed the second highest level recorded. There were up to 307 particles/m³ in samples from the Mediterranean and the inshore Atlantic close to Portugal and Spain.

Notably there were consistent levels recorded in the more offshore waters of the North Atlantic. These measurements in the mid-Atlantic might have coincided with the North Atlantic Gyre or 'Garbage Patch'.

Microplastic levels recorded in the Pacific were relatively less uniform likely due to the effects of strong local currents and the patchy distribution of particles as they dissipate from their source in the world's largest ocean.

The research and preliminary results for Turn the Tide on Plastic are described in more detail in our progress reports available to download from our ['Legacy' page](#) (and see below).

[View the detailed map](#)



Scientific drifter buoys

Thirty scientific drifter buoys deployed during four legs by all boats and during a fifth leg by four boats will continue to transmit data for up to two years. Every hour the buoys transmit via satellite measurements of sea surface temperature, latitude and longitude.

The buoys are part of NOAA's Global Drifter Buoy programme coordinated by the Atlantic Oceanographic and Meteorological Laboratories (AOML). [Read more](#).

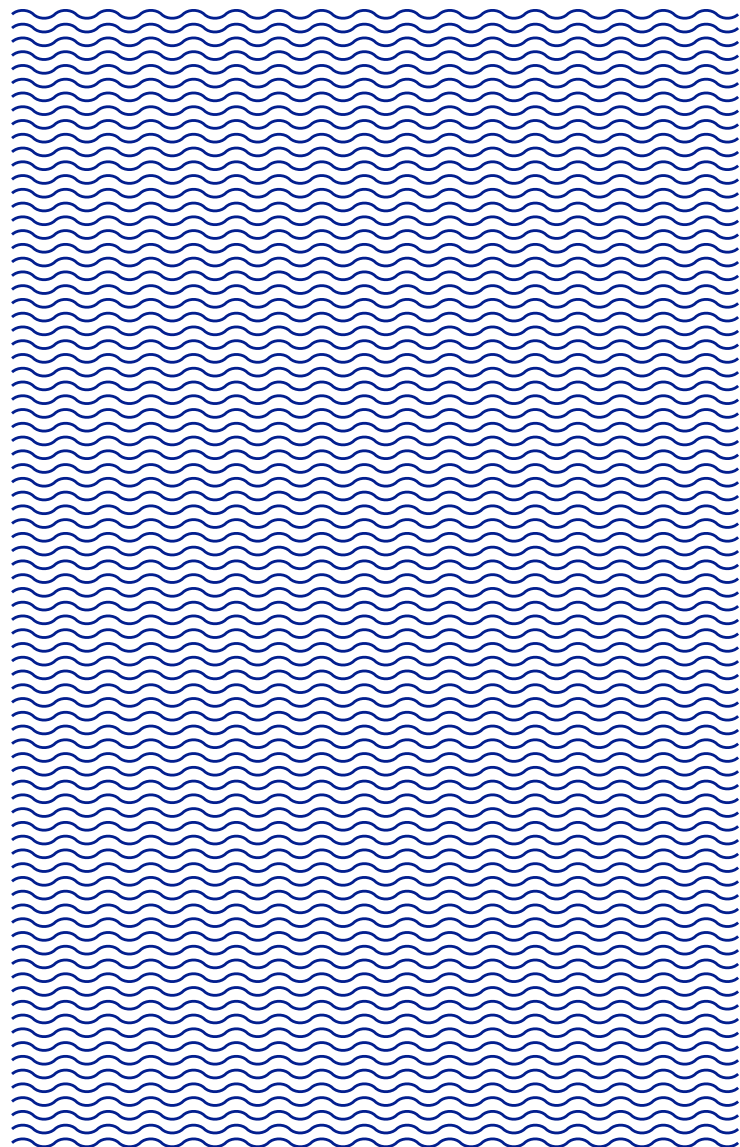
Deployment locations targeted critical regions otherwise difficult to seed with buoys due to the lack of vessel traffic. A fuller description of the chosen deployment locations is included in the [Science Programme Report](#).

The buoys will continue to contribute data for up to two years, including tracking ocean currents to better understand the patterns affecting microplastic dispersal in our ocean.

Watch a [clip about the buoys' contribution to science](#).

The data transmitted by the Race drifter buoys can be [viewed raw near real-time](#) on the Atlantic Oceanographic and Meteorological Laboratories website, where the [metadata](#) can also be accessed. A map-view of the buoys is available on the [Observing System Monitoring Center page](#).

Once quality-controlled, the data is available via the World Meteorological Organisation's GTS (Global Telecommunication System).



Meteorological data

The data were shared as a readable file with NOAA who incorporated the data into the Global Telecommunication System (GTS), which is the communications and data management component of the World Meteorological Organisation (WMO) and the Shipboard Automated Meteorological and Oceanographic System Initiative (SAMOS). The data were also archived in NOAA's National Center for Environmental Information database alongside the microplastics measurements to provide a more robust dataset.

The sharing of data contributed direct measurements to improve weather forecasting and climate studies and established a valuable connection between the race and the scientific community.

[Read the World Meteorological's World Oceans Day news article](#) about the importance of ocean observations and the race's contributions.

◆ Onboard meteorological instruments that relayed data to race headquarters from each boat every 10 seconds recorded:

- ◆ True Wind Speed
- ◆ True Wind Direction
- ◆ Latitude | Longitude
- ◆ Air temperature
- ◆ Sea temperature
- ◆ Barometric Pressure
- ◆ Time

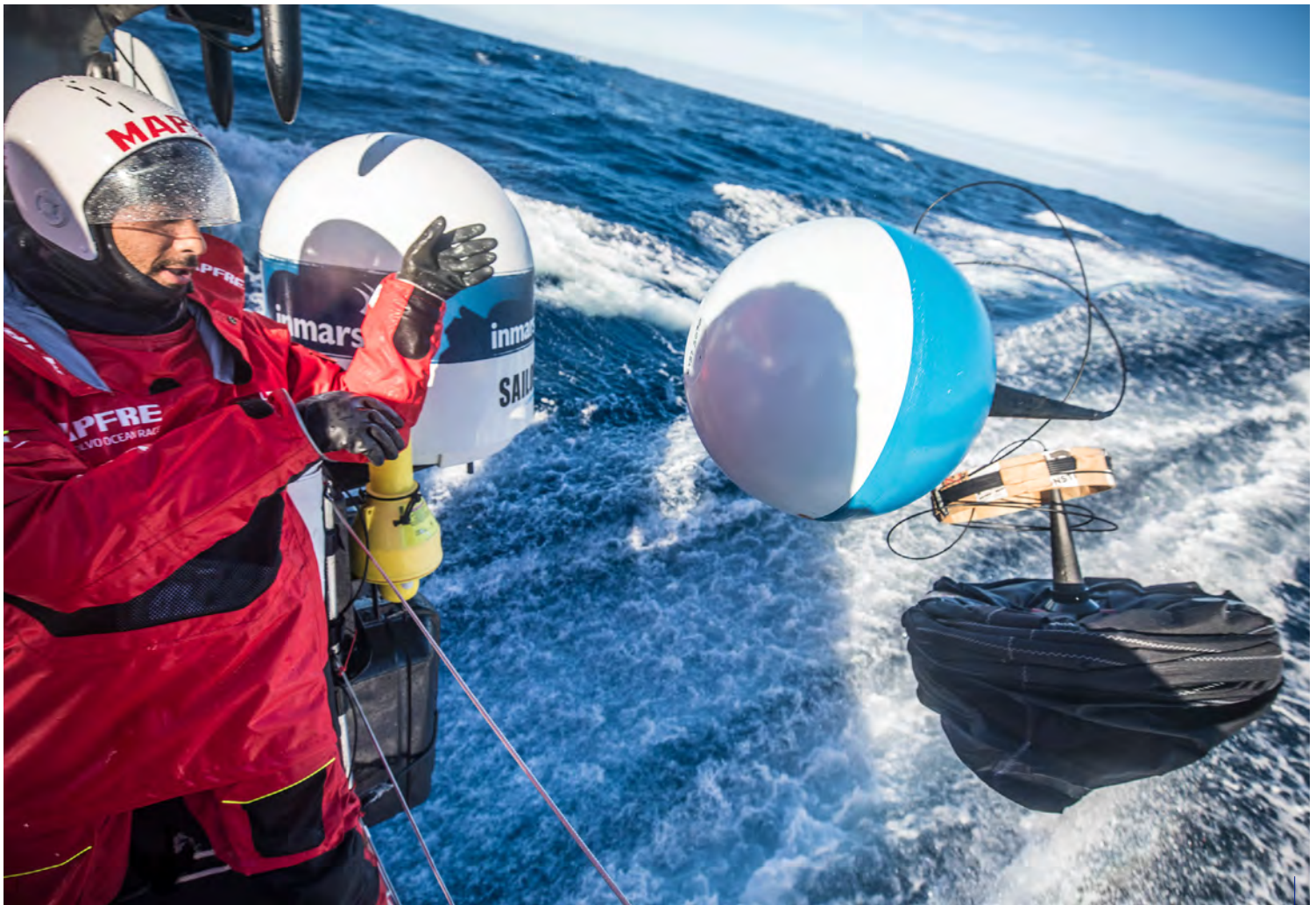


Photo: Ugo Fonollá/Volvo Ocean Race

Science Programme reports

Reports summarising the programme's progress during each of the legs can be downloaded from our ['Legacy'](#) website page. The final science report with details of both Turn the Tide on Plastic and Team AkzoNobel sampling can be downloaded [here](#).



[Preliminary data summary Alicante to Hong Kong](#)

[Preliminary data summary Hong Kong to Auckland](#)

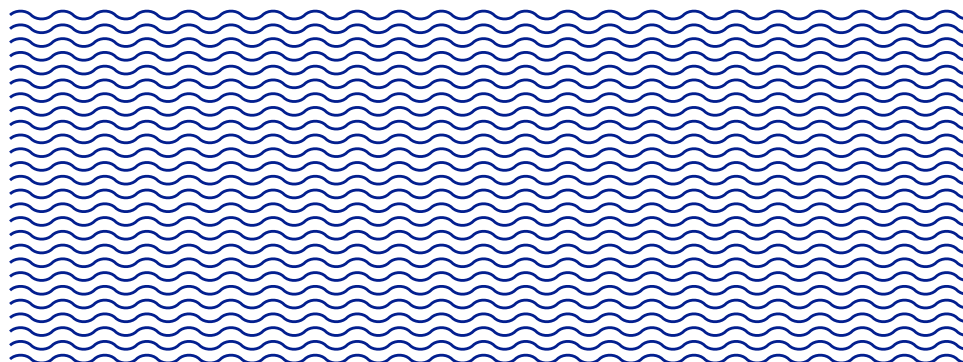
[Preliminary data summary Auckland to Itajaí](#)

[Preliminary data summary Itajaí to Newport](#)

[Preliminary data summary Newport to Cardiff](#)

[Preliminary data summary Cardiff to The Hague](#)

[Final Science Programme](#)



Citizen science in action - Seabin

At suitable stopovers we installed a Seabin, which sat in the water attached to the pontoon and collected surface litter. The contents were emptied at least daily to compile an audit of items collected.

The Seabin monitoring was mostly conducted by Race Village volunteers or local eco group volunteers on-site. This provided an opportunity for citizen science in action. The data was sent to the [Seabin Project](#) to add to their worldwide database.

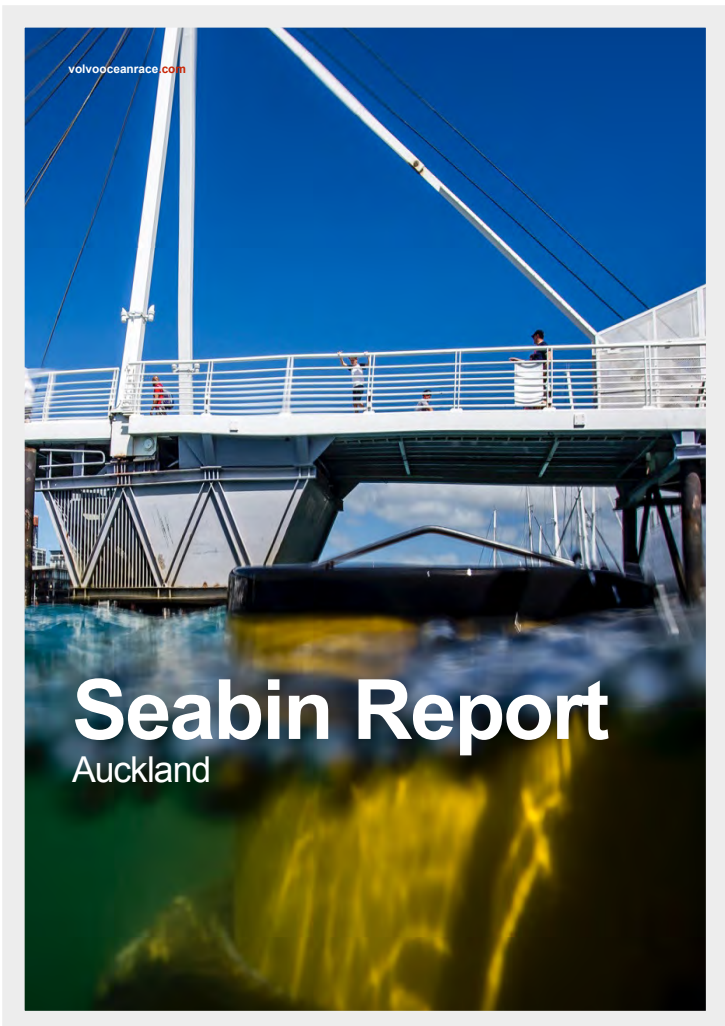
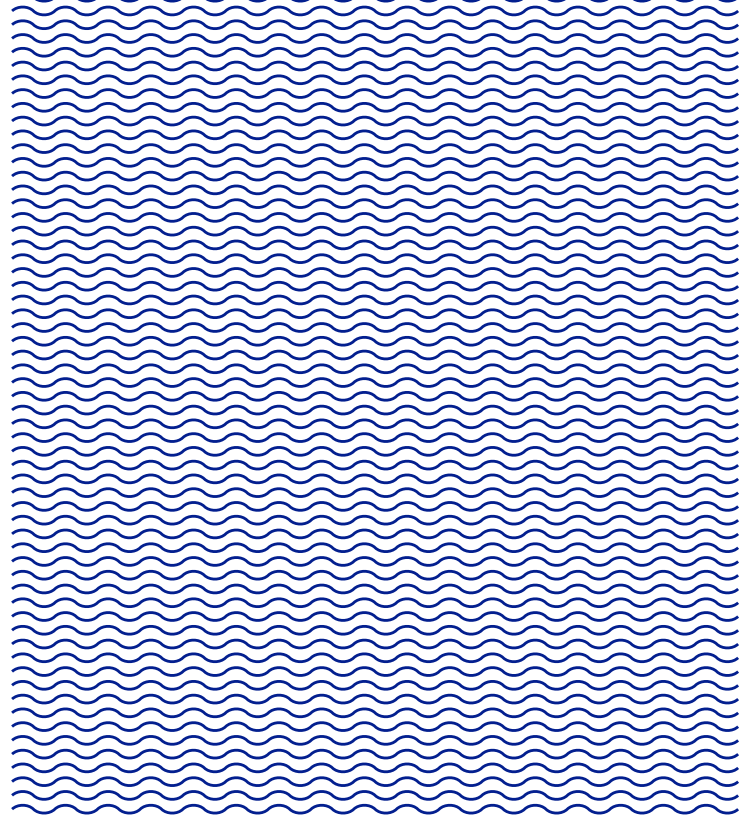
There were opportunities in some Race Villages to empty and analyse the Seabin contents in view of visitors which provided an intriguing attraction and valuable educational insight for people into the litter debris occurring in the nearby marina. In Itajaí, for example, the contents were emptied and categorised at the Turn the Tide on Plastic team base.



Photo: Pedro Martínez/Volvo Ocean Race



Photo: Pedro Martínez/Volvo Ocean Race



[Download the Auckland report](#)

In Auckland we had an opportunity to liaise with the New Zealand-based Ocean Spirit group who have installed a Seabin in their local marina to facilitate a Citizen Science project to increase local awareness of ocean litter pollution and to capture litter, and data, from their own marina.

Tutukaka student Pippa Benton visited us in Auckland and used the data from our Seabin collections to submit a project to a national schools science competition.

In Auckland our Science and Sustainability Education Programme Assistant Mairéad O'Donovan was on-site to conduct the daily analysis. The report compiled gives an insight into local ocean pollution issues.

Beach cleans

Case Study



Photo: Beau Outeridge/Turn the Tide on Plastic



Photo: Mats Lind/Volvo Car Corporation

Volvo Cars' executive management team were joined by Volvo Cars employees, race team crew and sailors, Race staff and local community groups and individuals at beach cleans at each of our stopovers.

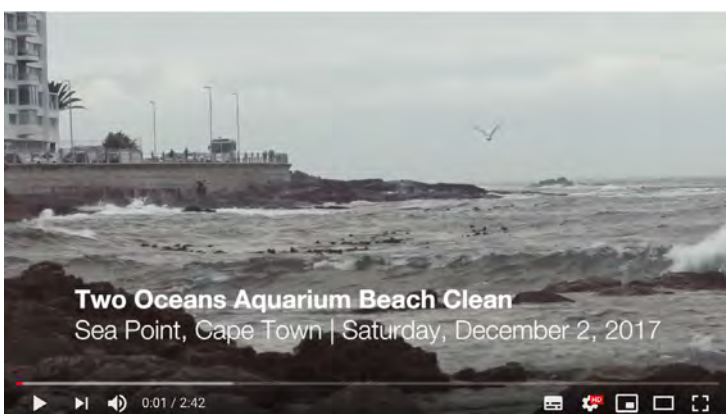
In some stopovers our beach cleans contributed to ongoing scientific data collection programmes to track plastic pollution levels and sources.

While our clean-up efforts were but a tiny drop in the ocean, they were enormously successful in getting many people to experience, first hand, the extent of the plastic pollution problem.

Partnering with local groups who lead beach cleans year round, it was a great chance to shine the spotlight on the commitment and enthusiasm of people in each Host City who are dedicated to Clean Seas and a healthy ocean for all.



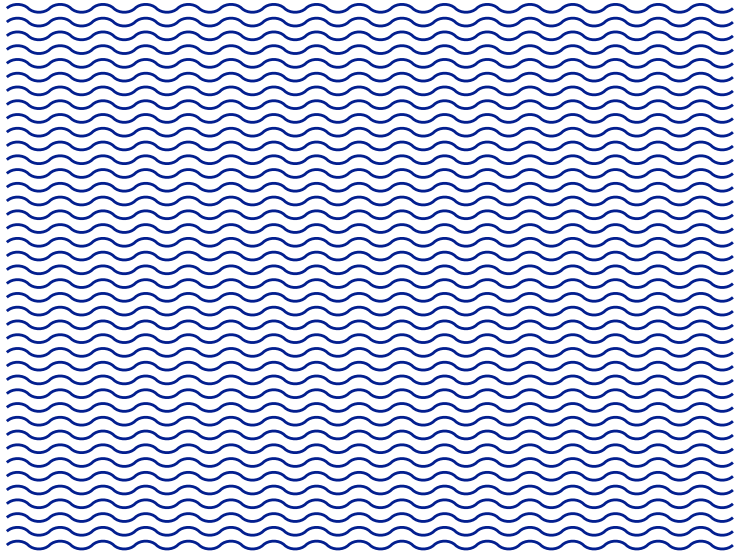
The effort was launched in Alicante with a good turn out of Volvo Cars staff members, Race staff and teams. [Watch the video.](#)



As well as the Volvo Cars clean up in Cape Town there was one organised at Sea Point by Two Oceans Aquarium, which was attended by Team AkzoNobel team members. [Watch the video.](#)



The activation lead by Volvo Cars in Hong Kong inspired participants to initiate similar activities in their own cities. [Watch the video.](#)



Volvo Cars organised their **Auckland** Beach Clean on Takapuna Beach in association with [Sea Cleaners](#). Whilst there wasn't a huge amount of obviously visible large plastic on this beautiful New Zealand beach, what was found taking a closer look was alarming.



Photo: Pedro Martinez/Volvo Ocean Race

In **Itajaí** there has been a legacy of beach cleans established since the last time we were in town. Now there is a thriving programme and culture of beach cleans which is ongoing between our stopovers.

During the 2018 stopover in Itajaí we held two beach cleans, one on [Praia do Atalaia](#) in partnership with [Eco Surf Brazil](#), and another with Volvo Cars in association with [Escola de Surf do Atalaia](#) and [Projeto Somos do Mar](#).



One of the beach cleans in **Itajaí** featured a competition using surfboards made from plastic bottle waste. Sailors from Turn the Tide on Plastic and Vestas 11th Hour Racing came down to try out the boards and go for a surf on local breaks. [Watch the video](#).



Photo: Pedro Martínez/Volvo Ocean Race

Three Beach Cleans were organised during our stopover in **Cardiff**. Cardiff Rivers Group Beach Clean conducted a public beach clean, on 'Dr Who' beach which is adjacent to the Race Village.

This group also conducted a beach clean in anticipation of the Race's arrival. See [photos from the day](#) and their remarkable clean up success.

Volvo Cars continued their commitment to beach cleans, which act as staff activations and engagement, in Cardiff. Volvo Cars also activated beach cleans across their entire international network on World Environment Day, June 5.

In Cardiff Sky Ocean Rescue conducted a beach clean in association with World Environment Day, on Barry Island. Members of our race team Turn the Tide on Plastic attended the event.

Supporting success

Case Study



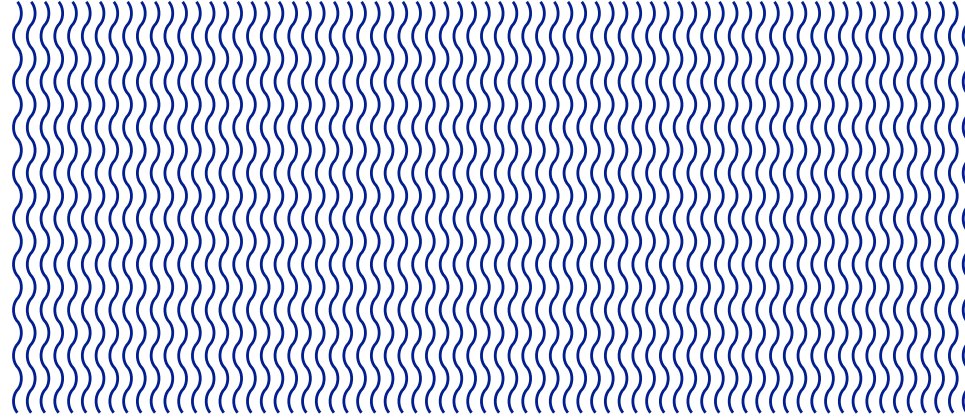
Photo: Marcos Porto/Itajai City Hall Photographer

To realise our sustainability ambitions we needed involvement and commitment from a huge range of people. Achieving our success was only due to the overwhelming interest and support of the Race's extended family.

Participation in tackling sustainability management and interest in our Ocean Health and plastic pollution campaign was overwhelmingly positive.

The full Sustainability Programme was established after most contracts were already drawn. While this caused some challenges because budgets, agreements and plans were already in place, almost everyone was willing to adapt to some degree to improve the sustainability performance of their corner of the race.

Our approach focussed on inspiring people about ocean plastic pollution and sustainable event management (if they didn't already need it!) and then enabling them to do the best they could, by providing the knowledge and resources they might need.



We kept in close contact with everyone who had a part to play. With twelve diverse destinations, and a workforce in the thousands, we targeted critical influencers who would then likewise influence their own stakeholder cascade.

We provided checklists and guides, and other tools to help decision makers navigate the most sustainable option.

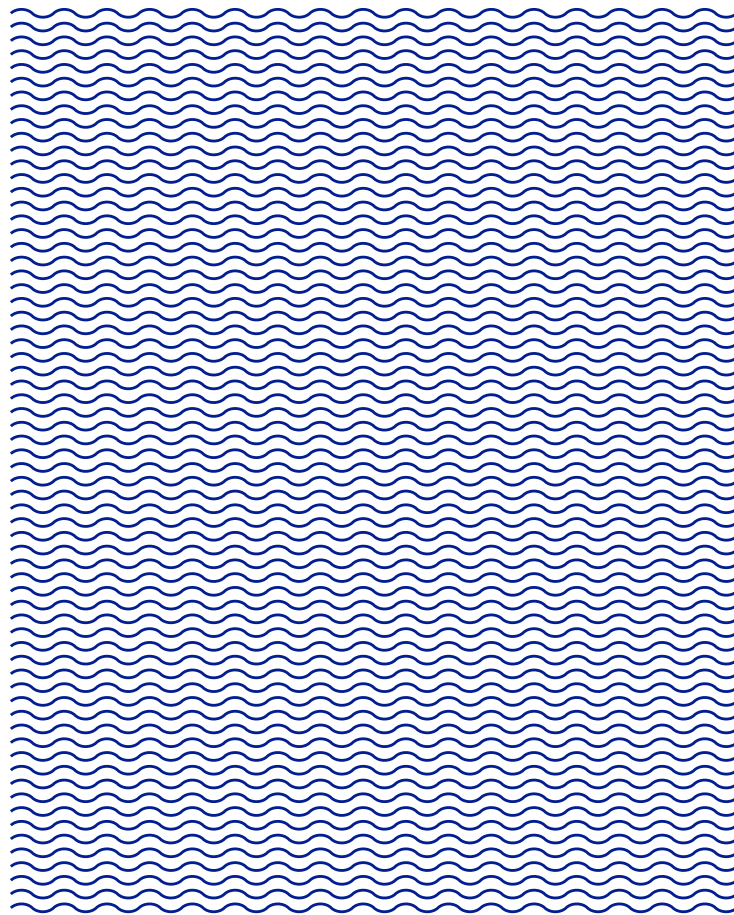
Our delivery partners were the most critical people to have on board. Through direct collaboration with the designated sustainability contact, and through the ongoing and wide-ranging interactions of our Head of Host Cities with each of our delivery partners, we were able to propagate the sustainability message.

We established a primary sustainability contact for each of our delivery partners, who acted as a champion of sustainability-based issues identification, and guardian of good decision making, within their organisations.

This was particularly successful when the sustainability contact within the delivery partner organisation had enough time within their own work remit, and importantly, had existing and extensive sustainability knowledge.

Where there was involvement or oversight by the Host City sustainability department, this added a valuable layer of support. Cardiff was a fantastic example of this collaboration, with Annie Middleton the Environment Officer for Cardiff Harbour Authority playing a critical role in the stopover's sustainability success.

Another approach to enabling sustainability excellence was establishing a sustainability committee and also enrolling other volunteer subject specialists, as was done at the Newport stopover by Sail Newport. The volunteer committee, chaired by Martha O'Connell and Dave McLaughlin, took charge of curating the One Ocean Exploration Zone exhibition space, and waste oversight, with extra special help from Jamie Haines and Sailors for the Sea. The Education Programme and onsite messaging was also delivered through the power of volunteer and educator Donna Kelly.



An imperative to meet external validation also drove success. In Gothenburg, our delivery partner committed to the [Swedish Environmental Database](#) review, and the stopover's sustainability co-ordinator Johanna Molin rose to the occasion and left no issue unresolved.

Sometimes sustainability success simply resulted from personal commitment to going the extra mile. Our favourite example of relentless enthusiasm and believing in the mission so much they just made it happen, was in Itajaí. The success of the reusable cup system, sustainability activations, education and schools visit programme was down to the personal passion and dedication by the stopover director Darlan Haussen Martins Jr, and the sustainability co-ordinator Adriene Carlotto (who also did marketing and comms!). Encouragement was also relentlessly given by our own Head of Host City Adolfo Rodriguez. In Itajaí we also had excellent support from the local government with Environment Secretary of FAMAI Victor Valente Silvestre, personally involved across many fronts. Success in Itajaí was also due to UN Environment having a country-office in Brazil and the wonderful Fernanda Daltro recruited Clean Seas volunteers and put a personal touch on the campaign for Clean Seas during the Itajaí stopover.

For other stopovers, where it was apparent we would need added help to take sustainability performance to the next level, we engaged local specialists.

In Lisbon we worked with [Circular Economy Portugal](#) on navigating the tricky waste system in the city. Lindsey Wuisan, Andreia Barbosa and the rest of the CEP team went above and beyond expectations! They provided a valuable additional layer of planning and quality control, and facilitated compost collection for the first time at an event like ours in Lisbon. They also undertook reverse logistics chain of custody tracing of all our recovered resources.

In Cape Town we engaged [NCC Environmental Services](#) who provided a waste auditor to help analyse our plastic footprint, do a materials flow analysis, keep quality control of our production waste, and do detailed analysis of our race boat waste. A huge thanks to Du Toit Malherbe for this. Our delivery partners WorldSport also engaged a local consultancy to analyse the efforts of the stopover to set new sustainability benchmarks for their future Cape Town events.

In Hong Kong we recruited local specialists to help navigate around the standard one bin system for events in that city. These included Merrin Pearse and Vicky Lee of [The Purpose Business](#), Helen Norton of [Sea Dragon Marine](#), plus the volunteer power of Matthew (Tsan Lam Mak) of Earth Production. To get off single-use plastic and onto reusables, we rented cups, plates and cutlery from [WeUse](#).

Our onsite co-ordinator Stefi Sichel played an indispensable role at all stopovers. She supervised our Green Team volunteers, worked with the Boatyard to help manage waste segregation, and supported the teams and cleaning contractors to meet our ambitions.

In Itajaí we recruited João Malavolta from [Eco Surf Brasil](#) who connected us to the beach clean and environmental causes locally and who was part of our onsite operations with the Seabin and Green Team supervision.



Photo: Pedro Martinez/Volvo Ocean Race

Appendix

In the following pages are more details on our sustainability framework, describing how we approach the three pillars of our strategy - impact, footprint and legacy.

More details about the operational or functional areas, locations of our race and events are included.

Our stakeholder's engagement is key to our successful sustainability performance and described in the appendix is how these critical partners participate.

Supporting the UN Sustainable Development Goals underscores our approach and we have given more detail in the appendix of our understanding of how our programme contributes to these global goals.

Included in the appendix is our performance against our objectives and targets. Included in this analysis are our identified improvement steps for future editions of the race.

Excluded from the appendix and the sustainability report is the GHG Inventory, which is available as a separate document. Also excluded, and used for management purposes, is our ISO 20121 index, which maps our conformity to the requirements of this international standard in event sustainability management systems.

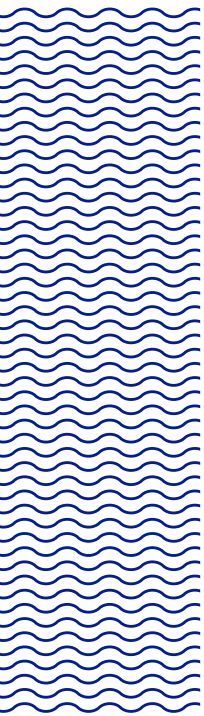
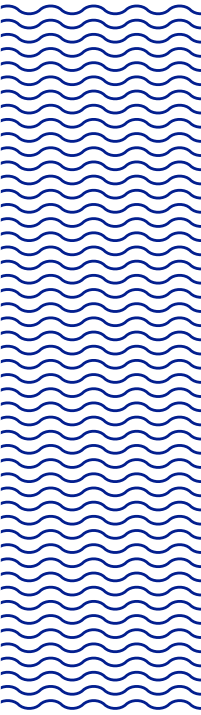
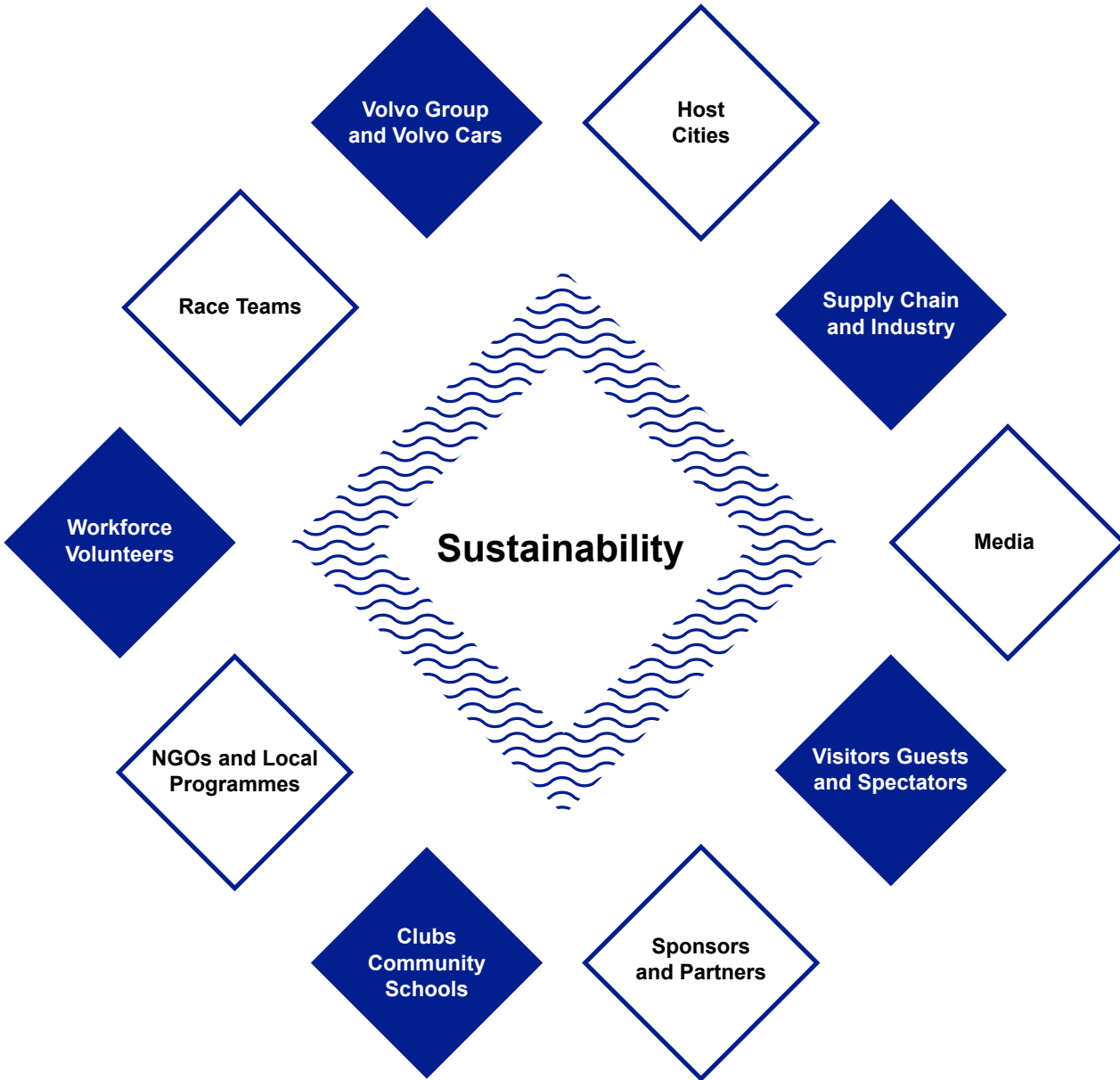




Photo: Martin Keruzoré/Volvo Ocean Race



Stakeholders



The Race is delivered in partnership with many stakeholders. Each entity also has its year-round planning, operations and business management and organisational areas such as finance, legal, human resources.

Volvo Group and Volvo Cars

As race owners Volvo Group and Volvo Cars used the race as a global platform for showcasing their companies, and networking and corporate hospitality opportunities. They presented their vehicles, equipment and technology within the Race Village. They designed the Volvo Pavilion, which was transported to each stopover, and acted as the premier venue within the Race Village. They had other activations such as the test track and vehicle displays, and of course corporate guest hospitality. Volvo Pavilion was managed, transported and operated directly by their staff, however its footprint and sustainable operating procedures are critical to the Race's overall impacts.

Host Cities

For each edition of the Race, destinations vie for the chance to be a Host City Race stopover. The Host City enters into a Host Venue Agreement with the Race. The agreement includes the operational and commercial responsibility and rights of the Host City and the Race. Host Cities assign a local delivery partner for each event. This is either the city's events department, a contracted event production company or the venue manager.

Race Teams

The Race consisted of seven teams who raced from stopover to stopover on identically designed boats. Each had team management and commercial partners, and managed their own accommodation, travel and hospitality. Team Bases were transported and built by the Race, set up in a 'pit lane' atmosphere within the Race Village. Here spectators get a chance to interact with the teams. The teams used these bases as their operational headquarters, hospitality centres and technical bases.

Sponsors and Partners

Without the support of sponsors and partners the Race could not go on. Their commitment to sustainability and Ocean Health is also part of their attraction to the Race and our invitation to them. We work with

our direct commercial partners, and others via teams and host cities, to ensure their involvement in the Race has a minimal footprint. The full suite of sponsors and partners can be viewed on the [Volvo Ocean Race website](#).

Suppliers and contractors

Many of our sustainability solutions were in fact provided to us by our supply chain and contractors. We rely on their innovation to present us with the most sustainable materials and operational solutions possible. For this reason we challenge our suppliers to seek out new ways of doing things and source deep into their own supply chains for the most sustainable solutions possible.

Volvo Ocean Race and Boatyard staff

All staff of the Race and the Boatyard were expected to play their part in sustainable operating practices of the company and the Race as it applies to their functional area. They were provided with training, guidance, checklists, tools, requirements and resources they needed to make the right decisions to minimise our footprint, maximise impact and to leave positive legacies.

Event staff and Volunteers

The broader event staff, such as those of contractors, Host Cities, sponsors, caterers and all our volunteers, were also critical stakeholders. Onsite inductions were carried out with all event staff groups to ensure they understand the duties and how to play their part in the sustainability ambitions of the Race.

Spectators and guests

We called on spectators and guests to minimise the footprint of their involvement in the Race. This included on land when they visited the Race Village and onboard the spectator fleet or guest onboard experience.

The list below indicates who is responsible for delivering which component of the Race.

Each Host City may have slightly different levels of control and influence, activation and responsibility in relationship to other stakeholders listed below. For example in some locations the city's local government is in

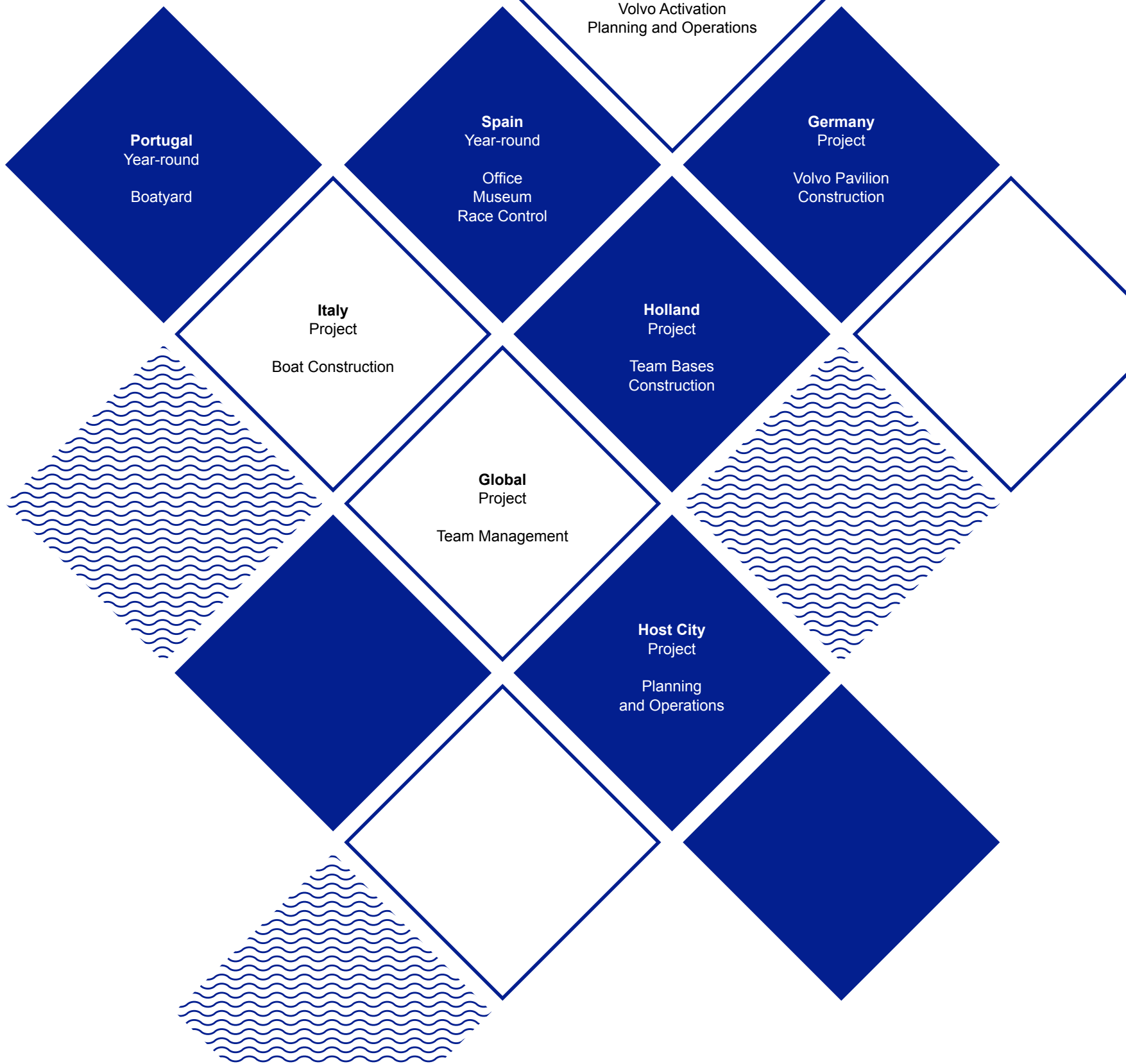
direct control of event delivery, with their internal events team being the delivery body. In other instances an event producer and promoter is the delivery partner assigned by the Host City, and in other examples (such as Lisbon in the 2017-2018 Race), the Race are effectively the local delivery partner.



Locations

The Race is headquartered in Alicante, Spain. Here is located the year-round business, planning and operations. A significant second operational base is in Lisbon, Portugal, where the permanent Boatyard was located.

The project was expanded by delivery and operational partners and major suppliers. This included the construction of the boats and key Race Village assets, as well as delivery partners such as Volvo and Host Cities.



The Race and the SDGs

Governments, businesses and civil society together with the United Nations are mobilising efforts to achieve the Sustainable Development Agenda by 2030. Universal, inclusive and indivisible, the Agenda calls for action by all countries to improve the lives of people everywhere. In 2015, countries adopted the [2030 Agenda for Sustainable Development](#) and its 17 Sustainable Development Goals.

The Race supports and agrees with all of the UN Sustainable Development Goals. The intentions of some of the goals are adopted as a matter of responsible practice, however some areas have direct touch points with our Sustainability Programme.



Objective 1

Engage and obtain commitment by stakeholders in the Race's Sustainability Strategy.



Objective 2

Increase awareness, provide education, and campaign for Ocean Health with a focus on plastic pollution.



Objective 3

Run an accessible, inclusive and safe event.



Objective 4

Protect the natural environment from Race and Event impacts.



Objective 5

Ensure responsible resource management.



Objective 6

Avoid the use of single-use plastics.



Objective 7

Source responsibly with concern for resource conservation.



Objective 8

Implement efficient production transport and travel plans.



Objective 9

Responsibly manage and report greenhouse gas emissions inventory.



Objective 10

Advance knowledge and obtain data on Ocean Health and plastic pollution.



Objective 11

Support innovation and technical solutions to sustainability challenges for sailing, Ocean Health and plastic pollution.



Objective 12

Disseminate new event sustainability practices to stakeholders.



By SDG

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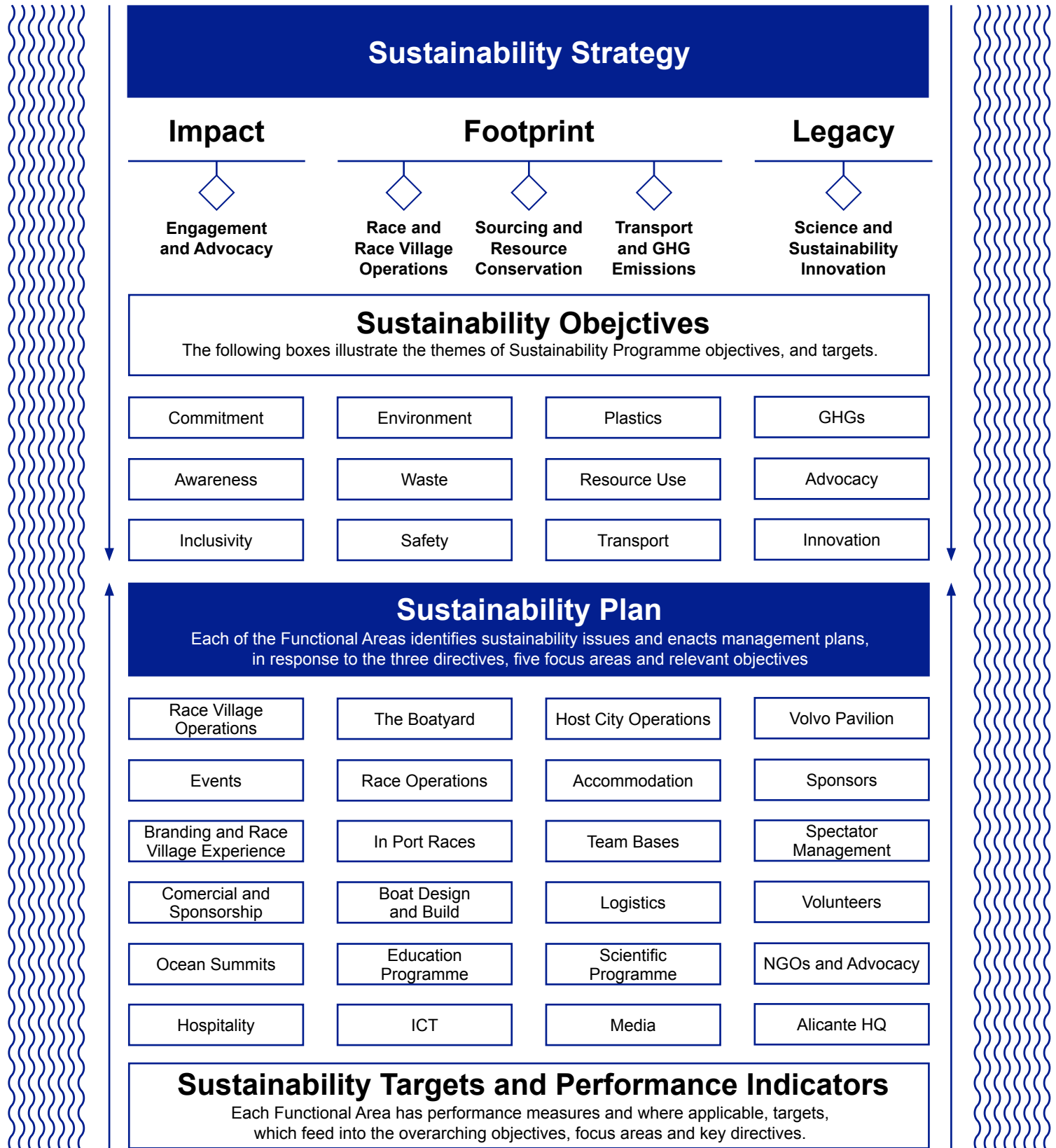
Objective 12

Disseminate new event sustainability practices to stakeholders.



Photo: Pedro Martínez/Volvo Ocean Race

Sustainability Framework



Three directives, five focus areas, twelve objectives

In creating our Sustainability Strategy, we identified three clear directives and five focus areas. These aspects were developed after consultation with internal and external stakeholders. This includes workshops with the Race's functional areas to identify the key areas of sustainability impact.

The following three key directives inform our approach to our Sustainability Programme management

Maximise our Impact



We will leverage the race's global platform to spread the message of Ocean Health and issue of plastic pollution amongst millions of fans and followers.

We will encourage participation by young people through our Education Programme and business and government through our Ocean Summits.

Minimise our Footprint



We will operate our business, the race and stopovers as sustainably as possible, with a focus on responsible resource use, avoiding single-use plastics, sustainable food sourcing, and greenhouse gas emissions management.

We aimed to meet local protocols and global best practice in sustainable event management.

Leave a positive Legacy



We will use our influence to engage decision makers to commit to a cleaner future.

Using our race round the world to capture critical data on Ocean Health to contribute to scientific research and ocean monitoring.

We will use our influence to support sustainable innovation in the marine sector and plastic pollution prevention.

The following five focus areas are identified as having the most relevance to our activities and interactions with sustainability.



Engagement and Advocacy

Engage internal and external stakeholders in our Sustainability Programme. Utilise the Race to advocate for Ocean Health and preventing plastic pollution. Engage young people through our Education Programme and business and government through our Ocean Summits.



Race and Race Village Operations

Conduct the Race and produce the Race Villages with sustainable event management. Meet local sustainability requirements and international best practice, including implementing ISO 20121. Promote sustainable stopovers and tourism.

Sourcing and Resource Conservation

Source conservatively, with environmental and social responsibility. Support local suppliers. Source from sustainable fisheries. Promote healthy eating. Focus on resource recovery. Avoid the use of single-use plastics.

Transport and GHG Emissions

Estimate programme freight and flight requirements and design-in ways to reduce this impact. Encourage sustainable transport uptake by all stakeholders. Measure and report GHGs. Review carbon balancing options.



Science and Sustainability Innovation

Influence lasting change to policies and practices relating to disposable plastics use and plastic pollution control. We will capture critical data while at sea and contribute to scientific understanding of the oceans in the most remote areas of the planet. Support sustainable sailing boat design and innovation.

Our Objectives

Maximise our impact

Commitment, Engagement and Satisfaction

Objective 1 Engage and obtain commitment by stakeholders in the Race's Sustainability Strategy.

- 1.1 Obtain commitment to Ocean Health and preventing plastic pollution by stakeholders.
- 1.2 Engage active participation in the Race's Sustainability Strategy by all functional areas, operational stakeholders and major suppliers.
- 1.3 Ensure the participation experience of workforce, teams, stakeholders and visitors meets their expectations.

Advocacy and Outreach

Objective 2 Increase awareness, provide education, and campaign for Ocean Health with a focus on plastic pollution.

- 2.1 Align with and offer exposure to Ocean Health and plastic pollution prevention programmes, campaigns and innovations.

- 2.2 Use the power of media and communications to change people's behaviour, specifically on plastic consumption and waste.
- 2.3 Ensure attendance at Ocean Summits by relevant an influential organisations and individuals.
- 2.4 Engage educators and young students in the Race, Ocean Health and plastic pollution.

Inclusivity, Diversity, Safety

Objective 3 Run an accessible, inclusive and safe event.

- 3.1 Ensure the Race is accessible for all who wish to be involved.
- 3.2 Inspire young people to develop the qualities needed to be part of an around the world sailing team.
- 3.3 Develop opportunities for a diverse, balanced and inclusive workforce and sailing team participation.
- 3.4 Ensure a safe, secure and welcoming environment for workforce, teams and visitors.

Minimise our footprint

Environmental Protection

Objective 4 Protect the natural environment from Race and Event impacts.

- 4.1 Adhere to all environmental regulation relevant to our activities.
- 4.2 Protect ground surfaces, riparian zone and waterways.
- 4.3 Protect and prevent disruption to flora and fauna, including marine life.
- 4.4 Prevent pollution, spills and releases to the environment.

Responsible Resource Use

Objective 5 Ensure responsible resource management.

- 5.1 Maximise energy conservation.
- 5.2 Optimise energy efficiency.
- 5.3 Maximise renewable energy supply.
- 5.4 Responsible water use and management.
- 5.5 Minimise total waste produced.
- 5.6 Maximise resource recovery.

Objective 6 Avoid the use of single-use plastics.

- 6.1 Avoid single-use plastic beverage bottles, service-ware, and catering consumables.
- 6.2 Reduce volume of production plastic used and maximise recovery.
- 6.3 Influence adoption of policies and practices relating to disposable plastics use and plastic pollution control.

Objective 7 Source responsibly with concern for resource conservation.

- 7.1 Source environmentally responsible materials and food.
- 7.2 Reduce total volume of materials purchased.
- 7.3 Source ethically and with social responsibility.
- 7.4 Support local suppliers.
- 7.5 Support sustainable accommodation.
- 7.6 Support sustainable fisheries.
- 7.7 Promote healthy diets.

Climate Change Impacts

Objective 8 Implement efficient production transport and travel plans.

- 8.1 Minimise production freight.
- 8.2 Minimise production fuel consumption.
- 8.3 Minimise production travel impacts.
- 8.4 Minimise attendee travel impacts.

Objective 9 Responsibly manage and report greenhouse gas emissions inventory.

- 9.1 Minimise Event and Race greenhouse gas emissions.
- 9.2 Responsibly manage and report greenhouse gas emissions inventory.

Leave a positive legacy

Information and Science

Objective 10 Advance knowledge and obtain data on Ocean Health and plastic pollution.

- 10.1 Increase awareness and action for the issue of Ocean Health and plastic pollution.
- 10.2 Use the Race to collect scientific data on Ocean Health and marine plastic pollution.

Innovation and Solutions

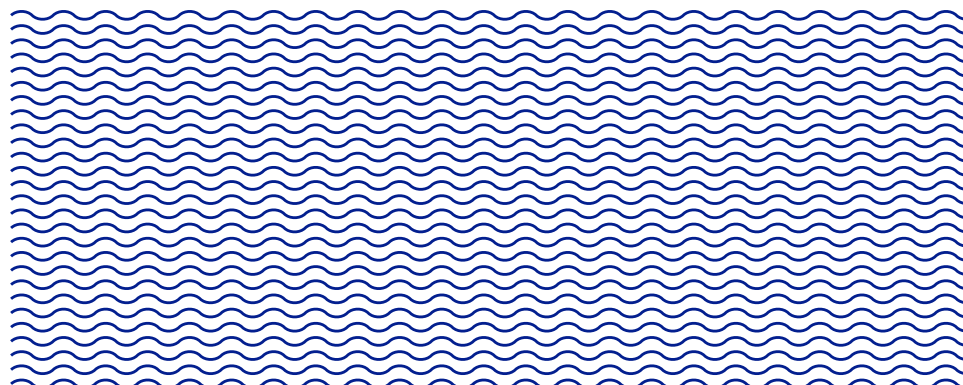
Objective 11 Support innovation and technical solutions to sustainability challenges for sailing, Ocean Health and plastic pollution.

- 11.1 Support sustainable sailing boat design and innovation.
- 11.2 Showcase and disseminate information on sustainability solutions.

Knowledge and Excellence

Objective 12 Disseminate new event sustainability practices to stakeholders.

- 12.1 Plan and deliver events in alignment with international and local sustainable event standards and protocols.
- 12.2 Introduce new event sustainability practices to stakeholders.



Performance against objectives and targets

Maximise our impact



Commitment, engagement and satisfaction

Advocacy and outreach

Inclusivity, diversity and safety

Minimise our footprint



Environmental protection

Responsible resource use

Climate change impacts

Leave a positive legacy



Information and science

Innovation and solutions

Knowledge and excellence

Environmental protection

Our aim

Objectives:

Adhere to all environmental regulation relevant to our activities.

Protect ground surfaces, riparian zone and waterways.

Protect and prevent disruption to flora and fauna, including marine life.

Prevent pollution, spills and releases to the environment.

Targets:

Zero spills or releases into the environment.

No non-compliance recorded with local environmental regulations.

Our progress

Our delivery partners ensured adherence to regulations relating to environmental protection within their event management plans. These were further ensured through oversight by local environmental protection agencies. In most cases our delivery partners were also part of the local government, strengthening the assurance that all environmental safety systems are in place.

No reportable spills or releases to the environment occurred during the Race Village construction, operation or deconstruction. However we did have some confetti and balloon based infractions early on in the Race.

In Itajaí, dredging and works were required and while there was some sediment movement and disruption to the water during this work, tests were undertaken to water quality to ensure the disruption was not hazardous and needed no further action.

Offshore sailing accidents occurred which resulted in loss of equipment overboard. This included sails and a mast.

Improvement steps

The formalisation of environmental management is assured within the delivery partner's work plans. However the environmental impact assessments were not provided to us directly, rather it remained within the delivery partner's remit.

We will in future require that the environmental impact assessment and monitoring plan be shared with us by our delivery partners, and that incidents and response reports are made available in a transparent fashion and in real-time.

We will require all delivery partners to keep a register of relevant environmental regulations or requirements, that is easily accessible for review at any time.

Commitment, engagement and satisfaction

Our aim

Objective:

Obtain commitment to Ocean Health and preventing plastic pollution by stakeholders.

Target:

100% of teams, staff, partners and suppliers sign a pledge to protect Ocean Health and not using single-use plastics.

Our progress

We had many commitments through signing the Clean Seas pledge, but 100% signing up was not achieved.

All race teams signed a Race Team Sustainability Charter which incorporated the Clean Seas pledge.

A huge amount of informal commitment was observed through our operational stakeholders with demonstrated action and feedback.

Improvement steps

We did not reach 100% of stakeholders signing the Clean Seas pledge. With additional resources we could have achieved more formal sign ups. We will need to in the future, include formally signing the Clean Seas pledge into partnerships, Host City agreements, employment or major supplier contracts. We will need to start campaigning and working with stakeholders earlier.

Objective:

Engage active participation in the Race's Sustainability Strategy by all functional areas, operational stakeholders and major suppliers.

Target:

100% of all Race functional areas, stakeholders and major suppliers to demonstrate active participation in Sustainability Strategy through their plans, decisions, and actions.

We have collected formal and informal feedback and have observed behaviour, attitudes and opinions. We have conducted research both with Race Village visitors and our workforce and external stakeholders.

We are very happy with the result given the time and resources we had to get this plan in action. We can do better next time through contract inclusions and long-term Race lead-up engagement and resourcing.

Pro-active participation was in evidence by many stakeholders. This was formally demonstrated with checklists and other management tools devised by various functional areas and operational stakeholders including delivery partners.

Innumerable small examples of changes to standard practice, especially around avoiding single-use plastic were in evidence across all stakeholder groups.

Some wrong decisions were made through lack of knowledge or understanding of issues by stakeholders and lack of time for effective engagement by our team.

There was some push back was experienced from areas that were under-resourced. Some push back and lack of involvement from stakeholders was also experienced where there were no contract inclusions requiring action.

Sustainability was sometimes seen as an extra and unscheduled piece of work, and in many cases no additional staff, time or financial resources were available or planned for.

We were not able to formally monitor every stakeholder and so we are unable to claim that 100% of functional areas, stakeholders and major suppliers demonstrated active participation.

For the future we would need to build capacity to monitor and report engagement and activity from all stakeholders.

Anecdotally, a huge proportion of stakeholders engaged either professionally or personally in the Sustainability Programme, particularly in single-use plastic avoidance and Ocean Health campaigning.

We can always do better in communications and engagement, training, support and guidance.

However, given the time and human resource restrictions we are very happy with the degree of buy-in by our stakeholders and their willing participation in reducing the footprint of operations and support of the Ocean Health and plastic pollution avoidance campaigns.

Our aim**Our progress****Improvement steps**

There was little time for 'ramping on' the idea of sustainability or our campaigns, and little time for effective training or professional development.

Objective:

Ensure the participation experience of workforce, teams, stakeholders and visitors meets their expectations.

It appears our stakeholders (staff, partners, host cities, suppliers and attendees) are very happy with our efforts! We received positive support for and engagement with the Sustainability Programme and our Ocean Health campaign from every type of stakeholder. We received positive feedback from all operational stakeholders on the level of support and guidance offered by the Sustainability Programme.

Moving forwards there is the opportunity to do more engagement, training and ongoing professional development with all workforce. This can include formal and informal sessions, and workshops with our stakeholders to explore opportunities to advance their sustainability performance with the Race.

Advocacy and outreach

Our aim	Our progress	Improvement steps
<p>Objective:</p> <p>Align with and offer exposure to Ocean Health and plastic pollution prevention programmes, campaigns and innovations.</p> <p>Target:</p> <p>Raising awareness and changing behaviour by pushing the 'Turn the Tide' message to 3 million visitors to our Host Cities globally.</p>	<p>The use of the Clean Seas campaign, and the inclusion of an aligned race team gave huge exposure for the message.</p> <p>The Clean Seas campaign gave us an anchor from which to stage our Ocean Health and plastic pollution messaging.</p> <p>We also offered, at each stopover, the chance for local NGOs, campaigns, innovations, projects and initiatives to be highlighted within the Race Village, through the Ocean Summits, in aligned activities and through our communications channels.</p>	<p>There is the opportunity to more formally engage and manage the participation of local Ocean Health and plastic pollution campaigns and groups, and those of partners, teams and sponsors.</p> <p>This could be through creating a race-related call to action which is adopted by all participating groups in the lead-up and during the stopover.</p> <p>The physical presence of local groups could be more creatively curated, within our Race Village so they are integrated rather than 'clipped on'.</p>
<p>Objective:</p> <p>Use the power of media and communications to change people's behaviour, specifically on plastic consumption and waste.</p> <p>Targets:</p> <p>Promoting UN Environment's 'Clean Seas/ Turn the Tide on Plastic' campaign to our digital audience – including 1.2 million Facebook fans.</p> <p>Using compelling storytelling and the race's significant media power to amplify the campaign – with a minimum goal of 30% of external media articles mentioning our Sustainability Programme.</p>	<p>The plastic pollution topic was well timed, with public fascination escalating and ever-increasing attention by media experienced over the duration of the race.</p> <p>Aside from interest in the sustainability programme in the sailing and some trade media there was significant cross over into the mainstream media mainly on the work of the Turn the Tide on Plastic team's efforts to promote the message and collect valuable scientific data during the race.</p> <p>Our online media exposure resulted in 820,555,488 online article views up to the end of the race.</p>	<p>Whether the coverage actually changed people's behaviour is something that wasn't measured.</p> <p>The CleanSeas pledge interface and website could have been better designed and the pledge call to action didn't contain any mechanism to continue the plastic free 'journey' of anyone who signed up.</p> <p>There was a lack of data made available on the media coverage generated by the Sustainability Programme by our monitoring agency for us to be able to understand the level and tone of the coverage.</p> <p>Engagement with the programme by all the teams would've made it possible to broaden the scope of pushing our content within the media. Most of the coverage focussed on Dee Caffari and she was a great spokesperson for the programme but more engagement by other teams would have increased the coverage in certain territories.</p>
<p>Objective:</p> <p>Ensure attendance at Ocean Summits by relevant and influential organisations and individuals.</p> <p>Target:</p> <p>Hosting 'Ocean Summits', gathering more than 2,000 decision makers and influencers from business, government and science to make commitments to Ocean Health.</p>	<p>The Ocean Summits attracted high level speakers and attendees and offered a forum for solutions innovators, scientists, policy and decision makers to convene.</p> <p>The Ocean Summits were successful against many measures. We met our attendance target, with 2,192 people attended the Ocean Summits - 1,827 attendees and 225 expert speakers. See speaker list and attendee profiles later in this report.</p>	<p>There is an opportunity to engage earlier with the race stakeholders (host cities, teams, race partners) to include them in the event in order to help them benefit from the event and maximise our impact at the same time. We also learnt that the attendees are keen to take part to event with more interactive format.</p> <p>There is also room for improvement regarding the concept of the event that could be more detailed.</p>

Our aim

Objective:

Engage educators and young students in the Race, Ocean Health and plastic pollution.

Target:

Developing an Education Programme for kids and teachers, with an initial delivery target of 25,000 students at Host Cities globally and online.

Our progress

The Education Programme has been enthusiastically adopted and proven as a powerful tool to engage young and old in Ocean Health and plastic pollution prevention.

The Education Programme hosted 20,000 students within our Race Villages and over 94,000 registered to use our online downloadable education assets. These included many different education facilities such as schools, environmental organisations, art galleries and homeschoolers in 40 countries.

Improvement steps

There is an opportunity for Host Cities and teams to provide better sustainability aligned activities, programming and giveaways for students and kids visiting the Race Village.

To optimise this opportunity further coordination and communication between Host City school programme organisers, team management and our Education Manager will be needed in advance of the Race village opening.

Inclusivity, diversity and safety

Our aim	Our progress	Improvement steps
<p>Objective:</p> <p>Ensure the Race is accessible for all who wish to be involved.</p> <p>Targets:</p> <p>100% of all public spaces within the Race Village to offer accessibility features for those with mobility or other access impairment.</p> <p>Accessible and timely information about the event, access and involvement is provided to all stakeholders.</p> <p>Priority to local sourcing for non-touring workforce, contractors, suppliers and programme participants (vendors, entertainment, activities).</p>	<p>Our delivery partners ensured priority to local vendors and workforce and installed accessibility features including mobility ramps, accessible amenities and parents rooms.</p>	<p>There is the opportunity to include viewing platforms, hearing impaired support, and in some Race Villages more accessibility features.</p> <p>There was not the requirement build into contracts for delivery partners to report on proportion of expenditure on local suppliers, workforce, vendors and entertainers. This can be included in future reporting expectations.</p> <p>There was not the organisational capacity to report on proportion of expenditure on local suppliers. This can be built into future sourcing reporting protocols.</p> <p>The concept of accessibility and inclusion can be further 'socialised' within the organisation and our delivery partners so that deeper consideration is given to these issues across all aspect of the event and Race.</p>
<p>Objective:</p> <p>Inspire young people to develop the qualities needed to be part of an around the world sailing team.</p> <p>Targets:</p> <p>Programme the Youth Academy into stop-overs and undergo outreach to other youth sailing programmes to incorporate relevant Race content into their curriculum.</p> <p>Team building and personal development content is included in the Race's Education Programme.</p>	<p>Our Education Programme and workshops include content on personal development. Sailors visiting schools also served as inspiration and education for young people.</p>	<p>There is the opportunity to further integrate this objective in lead-up programmes, especially tied to schools and sailing club activities.</p>
<p>Objective:</p> <p>Develop opportunities for a diverse, balanced and inclusive workforce and sailing team participation.</p> <p>Targets:</p> <p>A balanced workforce by gender, local status, and minorities (where relevant).</p> <p>Inclusion of rules to promote gender balance and opportunities for emerging talent development.</p>	<p>The team rules for the 2017-18 edition were set to ensure a considerable representation of female sailor and young talent. For the first time in the Race's history a woman was in the winning team.</p> <p>Whilst anecdotally there is a diverse, balanced and inclusive workforce, we do not have hard data on this for our delivery partners and wider stakeholdership. Within our organisation we have significant female representation at a management or higher level (46%).</p>	<p>There is the opportunity to further develop this objective in action.</p> <p>For balanced sailing teams this will mean continued consideration in sailing team entry rules and racing formats.</p> <p>Female representation at a leadership and board level could be strengthened.</p>

Our aim

Our progress

Improvement steps

Objective:

Ensure a safe, secure and welcoming environment for workforce, teams and visitors.

Targets:

Zero safety breaches.

Zero serious incidents.

Offshore sailing can be a high-risk sport and for this reason strict safety protocols are in place. Teams undergo rigorous training to endure the hazards of offshore sailing and extreme weather as safely as possible.

Unfortunate accidents still occur and this edition of the Race has not been spared. There has been tragic loss of life of one of our sailors and in a separate incident, a collision victim's life was lost. Unrelated to our race or Race Village activities, but held in the same precinct, a visitor's life was lost in a boating collision.

Onshore, while have the best in safety, security and responsible workplace practices, there have been some accidents within the workforce and with visitors. Our medical and first aid services onsite where able to successfully manage all incidents.

There were no serious security related incidents within our Race Villages.

Safety and security protocols, workplace behaviours, personal protection equipment, and safety inductions will continue to be reviewed and enhanced to meet best and current practice as we move forward with future races and events.

Our security and safety team, medical, emergency services, event and race operations review all incidents to plan for future health, safety and security protocols.

Responsible resource use

Our aim	Our progress	Improvement steps
<p>Objectives:</p> <p>Maximise energy conservation.</p> <p>Optimise energy efficiency.</p> <p>Maximise renewable energy supply.</p> <p>Target:</p> <p>Maximum renewable energy mix possible for mains supply in each Host City.</p>	<p>Our energy conservation efforts, in terms of advanced planning were limited to the construction intervention in the Volvo Pavilion. This reduced the energy demand for HVAC by an estimated 30%. This is an excellent result as a single example, however no other tactics for energy conservation were in place for the Race Village design.</p> <p>Energy efficient equipment was used which enabled energy savings where power was supplied from the mains grid. If energy efficient equipment, such as LED stage lights were used, but were powered by mobile diesel generators, it is unlikely that reductions in power demand lead to reductions in generator fuel consumption.</p> <p>Energy monitoring was undertaken to inform power planning for future stopovers. A Smart Power Plan was in place for The Hague, resulting in a 36.7% reduction in fuel demand, translating to avoidance of 53.6 tonne of GHGs.</p> <p>The Gothenburg stopover was the only Race Village which was completely on mains power supply and it was also 100% renewable energy sources.</p> <p>The Lisbon stopover installed temporary solar power. This did not significantly contribute to the power supply but it is estimated that a 5% contribution was made.</p> <p>A 20% biodiesel blend was used by Newport stopover for all diesel supply which resulted in avoidance of 14.8 tonne of GHGs.</p>	<p>There was little attention to energy conservation and energy efficiency, which could lead to reduced or more efficiently planned temporary power supply. This, along with focussed attention on renewable energy supply can be considerably improved for future Race Villages.</p> <p>This will need to be included in agreements with stopover delivery partners to put a focus on energy efficiency, reduced and more efficiently planned power distribution, and supply and transitioning to renewable energy.</p> <p>Climate controlled spaces and their efficiency must also be a focus to review the energy intensity of cooling temporary structures.</p>
<p>Objective:</p> <p>Responsible water use and management.</p>	<p>Water efficiency and responsible water and waste water management was in place by all stopovers and done well.</p> <p>In Cape Town the drought and severe water restrictions, and our Race Village operational response to it, demonstrated our ability to reduce our reliance on potable water. We succeeded in limiting our consumption to a volume equal to 10% of water volume typically consumed during an event of this type. In total 100,000 litres of potable water was consumed, and the remainder was grey water, used for washing boats and flushing toilets in the Volvo Pavilion.</p>	<p>Future Race Villages can look to our efforts in Cape Town and The Hague on ways to reduce the water demand and wastewater volumes.</p> <p>There were no requirements in place on flush volumes for toilets, and in some stopovers full flush toilets using potable water were in evidence. This must be included in future agreements to ensure the most efficient amenities are used.</p>

Our aim	Our progress	Improvement steps
<p>Objectives:</p> <p>Minimise total waste produced.</p> <p>Maximise resource recovery.</p> <p>Target:</p> <p>75% diversion from landfill, or exceed average recycling rates achieved by the Host City or event venue.</p>	<p>Our efforts to reduce waste, especially disposable plastic through food and beverage service resulted in reduced waste volumes. However, considerable volumes of waste appeared in the build and bump-in phase and bump out phase of most stopovers.</p> <p>Resource recovery varied from stopover to stopover, with our total resources avoiding landfill or incineration being 48.9%. Our top performers, Cardiff and Auckland both achieved over 80% recovery.</p> <p>In Gothenburg and The Hague residual materials were sent to energy recovery, and if we include this in our diversion from landfill figures, we have almost met our target, with entire race diversion at 66.62%.</p>	<p>There is an opportunity to reduce total waste created, especially in relation to the bespoke construction, installation and once-off branding used to create the Race Village.</p> <p>Where a public food court was in place, waste generated was three times more per person than at those Race Villages without food courts. There is the opportunity to reduce total waste, regardless of whether it is recycled or composted, through a reusable/washable serviceware system.</p> <p>Recovery of resources can be improved through better pre-event (build/bump-in), during event (back of house) and post event (break/pack-down) waste management. This may require a considerable increase in 'resource recovery' personnel, rather than just 'cleaners'.</p> <p>It was proven when additional back of house materials sorting stations were operating, higher recovery rates were realised. This will be planned-in at all possible stopovers for the future.</p> <p>For some destinations, such as Cardiff and Melbourne, the waste went through a 'dirty MRF'. This is where mixed waste is put through a materials recovery facility that accepts all waste and then recyclable material, incorrectly placed in general waste bins, is extracted. We will also actively seek such facilities as the processing location for our waste.</p> <p>Where it is deemed that onward handling or segregation of our materials is not optimal, or chain of custody of our waste materials cannot be guaranteed, we must continue to agitate and question, and look for options where we can be assured of the most responsible end of life for our resources to ensure they feed the circular economy.</p> <p>We traced end of life processing for as many materials as possible and will report on this at a future date. This will inform our approach to materials recovery for future events.</p>

Our aim	Our progress	Improvement steps
<p>Objectives:</p> <p>Avoid single-use plastic beverage bottles, serveware, and catering consumables.</p> <p>Target:</p> <p>Complete removal of single-use plastic water bottles.</p>	<p>We were successful in removing an estimated 95% of potential single-use plastic water bottles from our Race Villages.</p> <p>In three of our 12 Race Villages single-use plastic bottled water was for sale. Bottled water was still for sale in glass, which we would prefer not to have.</p> <p>In many of our Race Villages one or other of the hospitality programmes by sponsors inevitably provided plastic bottled water.</p> <p>Almost all security contractors provided bottled water to their staff, which was unfortunate as it is often the first thing people see upon entry to the Race Village.</p> <p>Read our case studies for more details.</p>	<p>Whilst our single-use plastic avoidance efforts were successful, there is always more we can do. For example:</p> <ul style="list-style-type: none"> • 100% of Race Villages have reusable/washable cup systems for public bars • Increased use of reusable food serveware and cutlery • No use of PLA cups or other packaging • Avoidance of all single-serve condiment packets and sachets • No use of plastic bottled water by our workforce and contractors (including security) • No type of water sold in single-serve disposable packaging
<p>Target:</p> <p>Reducing single-use plastic consumption related to food and beverage service in Race Villages by at least 80% from the previous edition of the Race.</p>	<p>We were successful in avoiding 85% of single-use plastic related to our food service in our Race Villages.</p> <p>In total it is estimated that 1,000,000 single-use plastic items were avoided due to replacement by compostable or reusable options.</p> <p>Unfortunately in Itajaí styrofoam containers were used by most traders due to a misunderstanding of 'foam' actually being plastic.</p> <p>See the Resource Recovery and Plastic Leaks case studies for further details.</p>	<p>We will work towards 100% avoidance at future events.</p>
<p>Target:</p> <p>Complete removal of single-use plastic cups</p>	<p>We estimate to have successfully removed 80% of potential single-use plastic cups from beverage service in our Race Villages.</p> <p>Disposable plastic cups were however present at the Lisbon and Newport stopovers.</p> <p>Unfortunately in some stopovers PLA (cornstarch) was used which by our standards is an unacceptable alternative to plastic cups.</p>	<p>We can get to 100% with more lead time and better communications, through contracting it in and supporting delivery partners and vendors with options.</p>

Our aim	Our progress	Improvement steps
<p>Target:</p> <p>Complete removal of disposable plastic food containers and lids.</p>	<p>We were able to remove single-use plastic containers almost completely from 11 of 12 stopovers. Some stopovers had small and occasional plastic leaks such as sushi trays and condiment tubs.</p> <p>Unfortunately in Itajaí styrofoam containers were used by most traders due to a misunderstanding of 'foam' actually being plastic.</p> <p>See the Resource Recovery and Plastic Leaks case studies for further details.</p>	<p>We can get to 100% with better communications and engagement, through contracting it in, and supporting vendors with options.</p>
<p>Target:</p> <p>Complete removal of plastic single-serve sachets (condiments).</p>	<p>Condiment sachets were surprisingly hard to avoid in some destinations due to restrictive food service regulations. On the whole where they were avoidable, they were replaced with bulk dispensing. Single-serve foil wrapped or plastic container butters proved a challenge almost everywhere in crew catering!</p> <p>See Plastic Leaks case study.</p>	<p>We need to scrutinise menus and look for barriers to why single-use condiment packets 'must' be used. There may be ways around this, or menus can be altered so these condiments are not required.</p> <p>Those managing the catering contracts must be responsible for ensuring compliance by the caterers and this begins with contracting it in.</p>
<p>Target:</p> <p>Complete removal of disposable plastic cutlery including straws.</p>	<p>We were almost 100% successful in removing plastic cutlery from the Race Villages. It appeared occasionally in crew catering when reusables ran out, and some food trucks in Hong Kong came with plastic cutlery which was removed once found!</p> <p>We were 99% successful in removing plastic straws from all of our stopovers.</p> <p>See Plastic Leaks case study.</p>	<p>We can get to 100% with just a bit more communications and engagement through those in sponsorship and vendor liaison getting the message correctly through to the vendors.</p>
<p>Target:</p> <p>Reduce the use of cling film in catering by 50% through increasing use of reusable containers.</p>	<p>Reusable containers were used by our catering contractor One, in the Volvo Pavilion and Sailors Terrace to reduce the use of cling film by 50%. This was successfully implemented and was in evidence through the lack of film plastic discarded in their waste stream upon audit of waste from these kitchens.</p>	<p>Further engagement is needed with caterers not under the direct control of ourselves - primarily caterers contracted by our delivery partners for crew, volunteer, hospitality and public catering. rather than just contracting this in, we need engagement programmes to have the caterers change their operating procedures. We hope to work with host cities in the lead up to our stopover to assist them in engaging the event supply chain in adopting practices to reduce their own plastic footprints.</p>
<p>Target:</p>	<p>Reusable containers were used by our catering contractor One, in the Volvo</p>	<p>Further engagement is needed with caterers not under the direct control of ourselves</p>

Our aim	Our progress	Improvement steps
<p>Reduce the use of cling film in catering by 50% through increasing use of reusable containers.</p>	<p>Pavilion and Sailors Terrace to reduce the use of cling film by 50%. This was successfully implemented and was in evidence through the lack of film plastic discarded in their waste stream upon audit of waste from these kitchens.</p>	<p>- primarily caterers contracted by our delivery partners for crew, volunteer, hospitality and public catering. rather than just contracting this in, we need engagement programmes to have the caterers change their operating procedures. We hope to work with Host Cities in the lead up to our stopover to assist them in engaging the event supply chain in adopting practices to reduce their own plastic footprints.</p>
<p>Objective: Reduce volume of production plastic used and maximise recovery.</p>	<p>We avoided a total of 338,207 single-use plastic bottles through our water refill points.</p> <p>We avoided a further estimated 1,000,000 disposable plastic items through transitioning off plastic to compostable or reusable options in food and beverage serviceware.</p> <p>Through the Musto initiative, we avoided four tonne of soft plastic packaging, which was a 70% reduction on previous packaging used.</p>	<p>We will be able to reduce our plastic footprint by focussing on currently 'unavoidable' single-use plastic, particularly that coming onto our sites through deliveries.</p> <p>We can maximise our recovery through better planning, resourcing, engagement, education and quality control.</p>
<p>Target: 100% recovery of plastics able to be recycled in each Host City.</p>	<p>We estimate to have recovered 80% of our total plastic footprint, with 20% of plastic lost to landfill through mismanagement.</p> <p>Other film plastic such as shrink wrap, bubble wrap and cling wrap was a target for collection and recycling. We recovered an estimated 70% of film plastic in our waste streams, at those stopovers where film plastic recycling services were locally available.</p> <p>See Resource Recovery case study.</p>	<p>Through more advance planning, better onsite resources including bins and personnel, more success will be achieved in ensuring all plastic in our Race Villages is collected for recycling.</p>
<p>Objective: Influence adoption of policies and practices relating to disposable plastics use and plastic pollution control.</p>	<p>All of our Race Villages had new event production practices which reduced single-use plastic and/or the Host Cities made announcements of commitments to new plastic pollution prevention actions or policies.</p> <p>See Resource Recovery case study and Legacy sections of this report.</p>	<p>Through long term engagement and working directly with future Host Cities, we have no doubt that examples of best practice we have seen during this edition of the Race and likely future advances can be adopted. Some will be required as part of our agreements and contracts.</p>
<p>Target: Uptake by Host Cities, venues and major suppliers of at least one new disposable plastic reduction or plastic pollution prevention action or policy.</p>		

Our aim	Our progress	Improvement steps
<p>Target:</p> <p>100% ongoing adoption of film plastic recycling for events by all Host Cities and their waste companies servicing events, where film plastic recycling is available locally.</p>	<p>We had grand ambitions in this area however we had success in three stopovers where we influenced the delivery partner or waste contractor on the importance of collecting film plastic separately. Perhaps our ambitions were too high, but we were very happy nonetheless with Auckland, Newport and Cardiff embracing film plastic collection for recycling.</p> <p>See Resource Recovery case study</p>	<p>Through more advance planning, better onsite resources including bins and personnel, more success will be achieved in ensuring all film plastic in our Race Villages is collected for recycling.</p> <p>Reduction and avoidance is also key. We will continue to work with our supply chain to advocate for film plastic free packaging where possible.</p> <p>We are working with our logistics partner GAC Pindar to develop the use of freighting devices which avoid the use of film plastic to secure mixed pallet loads in transport.</p>
<p>Target:</p> <p>100% ongoing adoption of use of bungees or other reusable fixings in place of disposable nylon cable/zip ties by delivery partners and Host Cities.</p>	<p>The re-usable bungees were hugely successful in avoiding hundreds of thousands of disposable cable ties. While we tried to influence our stopover delivery partners to join us in also using these to attach their 50% of branding, we were not successful and cable ties were used in most instances. The excellent outcome however, was that almost all of the branding installation companies were so impressed with the system that, while they were not ready to install the stopover's local branding with these bungees, they pledged to use them in their businesses in the future, which is a terrific result.</p>	<p>Reusable bungees were not a requirement of Host Cities for the attachment of their local branding which made up 50% of the branding in each Race Village.</p> <p>In the future we can require or more strongly encourage that these devices be used by their branding installation contractors.</p> <p>As we received such positive feedback from all branding install contractors in this edition of the race, we will be able to build a case study to convince new Host City delivery partners and their branding install contractors to adopt this cable-tie free attachment method.</p> <p>There is also an opportunity to engage other contractors that use a lot of cable ties, such as plumbers, electricians and ICT installers.</p>
<p>Objectives:</p> <p>Source environmentally responsible materials.</p> <p>Source ethically and with social responsibility.</p> <p>Support local suppliers.</p>	<p>We were able to approach sustainable sourcing across many fronts. However there is a lot of opportunity for better performance, especially with longer lead times, more engagement and rigorous oversight and reporting.</p> <p>As our event coming into a destination is seen by the Host City as an economic benefit in most cases, there is a distinct focus on local sourcing. All branding, caterers, infrastructure suppliers, service contactors and workforce were engaged as locally as possible.</p>	<p>As with other sustainability specifications, a focus on and requirement for sustainable sourcing should be included in future Host Venue Agreements and supplier contracts.</p> <p>Included must be the requirement to report on sourcing performance and for purchases or contracts of a certain scale or in a category deemed high risk, justification in regards to sustainability criteria and credentials for the purchasing decision would need to be given.</p>

Our aim	Our progress	Improvement steps
<p>Target:</p> <p>100% of all branding materials to be PVC free.</p>	<p>We achieved PVC free branding on our Team Bases, flags, fence fabric banners and most entranceways, information towers and stage, media backdrops, and other site branding.</p> <p>PVC was used extensively where branding stickers were required, especially by our sponsors and partners on their pavilions or other installations.</p> <p>In some stopovers, PVC free options could not be reasonably sourced, and so it was used for entrance way branding, information towers, low fence sponsor branding, and stage branding.</p>	<p>To improve our performance in materials use for branding, we need to work harder on sourcing PVC free alternatives, but especially important is that the alternatives used have an end of life plan.</p> <p>In a couple of cases, the strict adherence to the PVC-free rule meant that alternatives were used, which were eventually not able to be recycled locally, but PVC could have been.</p> <p>Our organisations and our stopover partners must work closely to ensure the best branding material decisions are made for each stopover and that, importantly, the end of life plan is built into the decision making and that it is part of the responsibility of those making the branding purchase decision to oversee the eventually recycling or redeployment of all branding materials.</p> <p>Strict and similar requirements must be placed on all stakeholders who will create bespoke branded installation and display items for our Race Villages.</p> <p>This will require our sustainability team to work closely with each destination to identify the best options considering availability of materials and eventual end of life re-processing.</p>
<p>Targets:</p> <p>100% of all paper used to be from sustainable sources.</p> <p>100% of all printing to use sustainable printing processes.</p>	<p>Our printing requirements for the Race by our organisation include reports and business development documents, invitations, posters and other promotional material.</p> <p>We required that all printed material was on 100% recycled or from FSC certified sources.</p> <p>A lot of additional printing was prepared by our delivery partners, teams, partners and sponsors. We were unable to control or track the source of paper and printing processes used.</p>	<p>We did not have influence or control over the printing done by third parties related to the Race. However we believe that with engagement we can use our influence in the future to have stakeholders (partners, sponsors, teams) source sustainable paper and printing.</p> <p>We would engage with all stakeholders that would print materials related to our Race, especially those present within the Race Village, to print on paper from sustainable sources, to consider renewable and non-toxic inks and to use printing companies with environmental management programmes in place.</p>
<p>Targets:</p> <p>100% of all timber to be from sustainable sources.</p>	<p>Timber was used in the construction of the Volvo Pavilion. It was all sustainably sourced timber in Sweden.</p>	<p>We have the opportunity to bring sustainable timber sourcing as a key issue to those stakeholders likely to use timber in their constructions and installations.</p>

Our aim	Our progress	Improvement steps
<p>Target:</p> <p>100% of all cleaning products used onsite to be environmentally preferable.</p>	<p>Timber used by our own team for building once off ramps or railings on the team bases and other.</p> <p>Other timber used throughout the Race Village by stakeholder putting in displays and installations was not able to be tracked or influenced.</p> <p>The ambition was to have environmentally preferable cleaning products. However it transpired that we had no control over the cleaning contractors chosen or the cleaning products they used.</p>	<p>We will need to engage with the sponsors, partners and teams directly and especially in association with the local delivery partner to ensure they push the message of sustainable timber sourcing.</p> <p>This is an area of considerable improvement potential. It will require engagement with the local delivery partners to either choose green cleaning companies or to influence or require those cleaning the sites to use appropriate products. of sustainable timber sourcing.</p>
<p>Objective:</p> <p>Source environmentally responsible food.</p> <p>Source ethically and with social responsibility.</p> <p>Targets:</p> <p>100% of all eggs to be sourced from free range chickens.</p> <p>100% of all coffee and tea served or sold to be from fair trade sources</p> <p>70% of all fresh produce to be sourced locally or from organic sources.</p>	<p>We are only able to report on the catering provided by our catering partner One. They put significant effort into sourcing local, organic, fair trade, or other sustainable farming or harvesting practices, for meat, poultry and eggs, dairy, seafood, produce, pantry, and beverages.</p> <p>Where it was possible these items were sourced.</p> <p>Where free-range eggs were available locally these were sourced.</p> <p>100% of tea and coffee was from fair trade sources.</p> <p>It is not possible to correctly measure the percentage of produce purchased from local or organic sources as this type of reporting was not built into the administration requirements of our contract with One. However they reported on their sourcing successes and at almost every stopover produce from local, organic, biologically sourced, or agriculture with responsible water practices was sourced.</p> <p>Our awards night team also worked hard to ensure that only sustainable seafood was served, checking with every venue their proposed seafood offering and adjusting where necessary after consultation with the sustainability team.</p>	<p>Our caterers were highly engaged in sourcing as sustainably as possible. It is possible with more preparation and local support from host cities and delivery partners, better sourcing channels could be found to ensure an increased representation of sustainable, seasonal and local ingredients.</p> <p>Additionally, there were no formal requirements on any other caterers, food trucks, hospitality, crew, volunteer or public catering. This can be drastically improved for future editions. However some instances occurred where responsibly sourced, local and sustainable food was served.</p> <p>There is a huge opportunity to align and highlight local, seasonal and sustainably sourced food, through our messaging to guests.</p> <p>In some instances (for example in Hong Kong) food had to be imported from Australia in order for it to be sustainably sourced. The balance between sustainable sources and short travel must be considered in the future and perhaps menus and catering expectations adjusted to reflect the availability of ingredients locally.</p> <p>Additionally a sustainable sourcing report could be provided by the touring caterer to show the degree of sourcing research that has been done to justify various sourcing decisions. The caterer could be required to have local support by a sustainable food specialist who can advise on appropriate menu items to reflect the sustainable ingredients available locally.</p>

Our aim	Our progress	Improvement steps
<p>Objective:</p> <p>Support local suppliers.</p> <p>Target:</p> <p>70% of all fresh produce to be sourced locally or from organic sources.</p>	<p>We required that our caterers source locally whenever possible.</p> <p>Whilst the firm statistics are not available, the report provided by One Catering indicates a significant amount of local sourcing of produce and we are satisfied that they exhausted the local supply chain opportunities and tailored menus to suit available seasonal produce.</p>	<p>We could have a seasonal and sustainable produce guide developed for each stopover, in advance, in coordination with local entities and the Host City. This could the inform menu planning for both our travelling caterer and local caterers and food vendors.</p> <p>We could require detailed reporting from our touring caterer and from the delivery partner on local produce used. This is possible as it was undertaken by our Gothenburg stopover as part of the sustainable event certification locally.</p>
<p>Objective:</p> <p>Support sustainable fisheries.</p> <p>Target:</p> <p>100% of all seafood served or sold in Race Village and associated events, under the control of the Race to be from sustainable seafood sources. Where sustainable seafood sourcing is not available, no seafood will be served.</p>	<p>Only sustainable seafood was served by One catering in our own catering operations – this is for hospitality in the Volvo Pavilion and Sailors Terrace.</p> <p>We are unable to report on the seafood catering of other hospitality programmes or public catering. There was a huge amount of seafood available at all stopovers in corporate hospitality catering, crew/volunteer catering and in public food catering. Apart from in Newport, no acknowledgement was made by any food vendor on the provenance of their seafood supply. Of note was the inclusion of a sustainable seafood programme at the Lisbon stopover, however for the seafood being sold in the public catering area was no indication if it was from this promoted sustainable seafood sourcing programme.</p>	<p>There is the opportunity to drastically improve the sustainable seafood mandate within all catering operations, for corporate hospitality, crew/volunteer and public.</p> <p>This will require support in identifying the most sustainable options available locally, at the season we will be there, as well as direct assistance in sourcing.</p> <p>All catering contracts will need to have sustainable seafood requirements and will have to include provision of proof of sustainable seafood sourcing.</p>
<p>Objective:</p> <p>Promote healthy diets.</p> <p>Target:</p> <p>100% of all catering service and public food offering in the Race Village to offer fresh, healthy and dietary diverse options.</p>	<p>All Race Villages, in crew/volunteer, corporate hospitality, and public catering offered a variety of health, fresh and dietary diverse options.</p> <p>Complaints are always received for crew catering, and some destinations may have needed to provide more vegan, gluten free and vegetarian options.</p>	<p>We could improve the offering by including information in advance of the menus offered particularly by public caterers, to be assured of a balanced and diverse enough range.</p>
<p>Objective:</p> <p>Reduce total volume of materials purchased.</p> <p>Target:</p>	<p>We were successful in reducing the volume of giveaways through our hospitality and awards nights programmes.</p> <p>While budget constraints serve to make purchasing as frugal as possible, there was still evidence of over-supply of promotional</p>	<p>We will continue to carefully monitor volumes and have expenditure restrictions to likewise dampen the likelihood of over supply.</p> <p>We must plan in the likelihood of sponsor additions and sailor changes so that exist-</p>

Our aim	Our progress	Improvement steps
<p>Measurable reduction in materials use across all relevant sourcing sectors.</p>	<p>materials and merchandise.</p> <p>A complication was the addition of new sponsors and changing of race team members. This required the branding to be re-done to keep up to date with changes.</p> <p>Some of this was in part due to no awareness of the Race being sold and therefore the name and logo no longer being valid. Some purchases were made with a quantity discount in mind, leading to higher quantities and a view to overflow moving to the next Race.</p>	<p>ing branding does not become redundant.</p>
<p>Objective:</p> <p>Support sustainable accommodation.</p> <p>Target:</p> <p>100% of all hotel nights for Race production personnel, teams and guests to be in facilities with sustainability credentials, policies, programmes, commitments or actions.</p>	<p>This objective and target is aspiration and hopes to direct our future negotiations and engagement with Host Cities around sustainable hotel programmes.</p> <p>We were not able to prescribe which hotels were allocated to us for this edition of the Race as the hotel nights are provided by the Host City as part of the agreement with the Race.</p> <p>Regardless, some hotels were observed to have sustainability practices in place, and where the hotel was part of a larger chain with corporate commitments, this was more obvious.</p> <p>There were many examples of good practice, however we still experienced poor practise, such as daily towel changes when in-room cards said to leave them 'on the hook or railing', no in-room recycling bins, no water refill points, and disposable plastic for breakfast buffets, which was shockingly present in most hotels used by us in Newport.</p>	<p>There is the opportunity to engage with hotels via our Host Cities and delivery partners. While the hotels themselves may be set and not able to be changed due to local arrangements, it is still possible for us to require the sustainability credentials of the hotels to be reviewed and provided, and for further engagement and work to be done with hotels that could improved. By adding our voice as a customer, asking for action, we may be able to see some changing practices. A focus would likely be on water refill stations being available, no straws in bars, and no single-serve plastic packaging on breakfast buffets.</p> <p>It is possible that we could encourage or require hotels to sign up to the Clean Seas pledge as part of the package to be our aligned hotel provider.</p>

Climate change impacts

Our aim	Our progress	Improvement steps
<p>Objectives:</p> <p>Minimise production freight.</p> <p>Minimise production fuel consumption.</p> <p>Minimise production travel impacts.</p> <p>Minimise attendee travel impacts.</p> <p>Targets:</p> <p>100% of all production freight and travel will be recorded and reported.</p> <p>All short flight journeys taken by air will be reviewed for train travel for future trips and policy inclusion.</p> <p>90% attendee travel by local visitors via public transport or active travel.</p>	<p>Analysis is underway on our complete greenhouse gas emissions inventory. This will include the freighting intensity of the project, across several measures.</p> <p>Efforts were made to ensure efficiency of freight and reduction of air freight. However the comprehensive measurement and analysis of our greenhouse gas emissions for the 2017-18 edition will enable reflection on the GHG intense areas of our project and where efficiencies can be realised through changing production elements and logistics.</p> <p>Through observational research we can assume that a large proportion of attendees travelled to the Race Villages by public transport or active travel (cycling, walking).</p> <p>Some examples of GHG avoided due to initiatives include the following estimates:</p>	<p>With the data provided through our greenhouse gas inventory measurement and analysis, we are sure to be able to make management decisions which will mean reduced greenhouse gas emissions.</p> <p>We are also analysing the impacts of the various aspects of our race, including the impacts of our partners, teams and hospitality programmes.</p> <p>There is the opportunity to support the development of programmes that we can invest in to reduce the greenhouse gas emissions of our activities and to engage our stakeholders to join with us.</p> <p>These programmes can be within our own operations and supply chain (insetting – or ‘internal offsetting’) through investment in GHG reducing solutions within our own field of influence, and through investing in partnership with our supply chain in GHG reducing technologies or techniques.</p>
<p>Objectives:</p> <p>Minimise Event and Race greenhouse gas emissions.</p> <p>Measure and report greenhouse gas emissions inventory.</p> <p>Target:</p> <p>Measure and disclose Event and Race greenhouse gas emissions.</p>	<p>Composting - 18.38 tonne Timber recycling/biomass - 37.35 tonne Film plastic recycling - 2.16 tonne Smart power plan The Hague - 53.6 tonne Biodiesel use - Newport - 14.8 tonne Water refill points - 68 tonne</p>	<p>We can also support GHG reducing projects which are not within our own organisation or supply chain – using a typical ‘carbon offsetting’ approach. If we choose this option, we will work closely with project developers and NGOs to ensure that any projects have climate benefits (GHG reductions), social benefits, and plastic avoidance or plastic pollution reduction benefits.</p>

Information and science

Our aim

Objective:

Increase awareness and action for the issue of Ocean Health and plastic pollution.

Targets:

Track awareness and action over time through surveys and interviews, leading to measurable target creation.

35% of attendees visiting the Race Village will leave with increased awareness of at least one issue related to Ocean Health, as measured by entry/exit surveys.

Our progress

We have not been able yet to track awareness over time, however we plan to build this into our Education Programme and research data as we move forward.

We did not undertake exit surveys which tracked their increasing knowledge due to Race Village attendance.

However we did ask in our survey the level of understanding people had about ocean plastic pollution and whether they found out about it through the Race.

50% of the 2,100 people surveyed said they new a little bit about the issue, and 44% said they knew a lot. Only 1% said they had not heard about it before and 5% said they found out about it because of the Race.

Slightly more people (7%) in Cape Town and Itajaí said they found out about it because of the Race. The highest proportion of people in Newport (60%) and The Hague (70%) said they knew a lot about the issue of Ocean plastic pollution.

Improvement steps

There is the opportunity, with more staff and time resources to more rigorously survey and track the effects of our awareness building programme.

Objective:

Use the Race to collect scientific data on Ocean Health and marine plastic pollution.

Target:

Successfully implement our race boat based data gathering programme, through deployment of monitoring devices and collection of samples.

We established successful collaborations with the scientific community to provide invaluable access to direct measurements and samples, particularly from remote areas. By working in collaboration with globally significant agencies, such as NOAA, and a reputable research institute we were able to maximise the value and potential applications of the data collected. This is reflected by the number of databases that our data have been incorporated into, to remain available to the scientific community forever. Review the case study later in this report for more detail.

The collaboration with a reputable research institute and instrumentation specialists allowed for the development and testing of an innovative sampling system for microplastics. The success of the system allowed for the collation of a unique near-synoptic dataset and has the potential to contribute to establish a globally recognised standard for microplastics research. This research will be submitted for peer-reviewed publication. Review the case study later in this report for more detail.

Going forward we can now build on existing collaborations and establish further relationships with reputable institutions and agencies so that equipment design and data collection potential can be optimised within the context of the race.

To avoid conflict with 'one-design' limitations this will require early collaboration so that instrumentation can be integrated into boat design rather than being an inconvenient add-on at a later stage.

An exceptional opportunity exists to engage all teams so that vital sampling becomes an integral part of the race, with minimum impact on racing.

We will maintain our focus on plastic pollution but can aim to extend our impact in future by also highlighting other specific Ocean Health issues. This will require early collaboration during the boat design phase and to ensure commitment from teams.

We intend to continue our collaboration

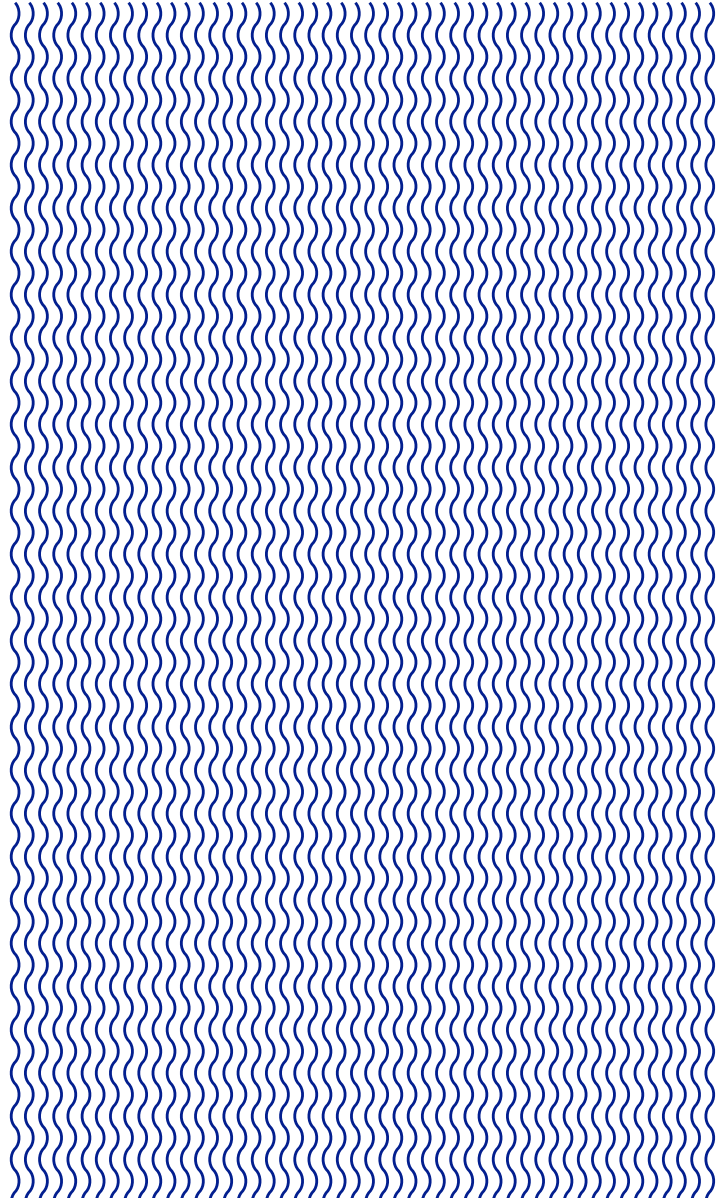
Our aim**Our progress****Improvement steps**

Communication of the science using the platform provided by the race and sailors' involvement in the research allowed for outreach regarding Ocean Health issues to an exceptionally wide audience and added considerable gravitas to our sustainability message.

Based on the success of our microplastics data collection and the associated success of communications about the dataset generated we engaged an elite group of cross-sector experts to discuss how efforts and expertise could be best coordinated going forward in the area of micro and nano plastic research.

with the scientific community to establish a standardised method for microplastic research - this was initiated at our science workshop and we will follow-up on the success of those discussions to bring about action and progress.

Continue cross-sector engagement and communication of results so that the impact of this and future scientific research can be maximised.



Volvo Ocean Race 2017-18
Sustainability Report